

The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

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GREATEST JOURNALIST OF ALL TIME

JACK AND THE BEANSTALK

SOYA BEAN AND ITS FUTURE

Regent's Park Botanist Does a Great Thing for Us All

NEW SOURCE OF FOOD

By Our Natural Historian

It would be curious if London, which eats so much and is said to suffer from a terrible atmosphere, were to provide the country with a new and highly important food. Yet it seems that such a thing may happen.

Mr. John L. North, curator of the Royal Botanical Gardens, Regent's Park, has produced a variety of soya bean which comes like a giant from its stalk to promise the nation aid in the feeding problem. It is a veritable achievement, a modern version (if Mr. North will forgive us taking the liberty) of Jack and the Beanstalk.

Readers of the C.N. know something of the soya bean, one of the most important food elements in the East, where it very largely takes the place of meat to complete the necessary diet based on rice. Attempts to cultivate it in England have hitherto failed, and the story is not without interest.

Plant that was Homesick

The bean is such an important little fellow that the Government took considerable trouble to get it to grow here. All efforts of private growers having ended in disappointment, the Government obtained many varieties of seed from Japan, and all failed. Then they got soil from Japan, and still the little beans seemed homesick, and declined to do more than put forth flowers, with never a bean to bless the growers. The same thing happened with soya beans and soil from Manchuria, though a selection secured from Manitoba was moderately successful.

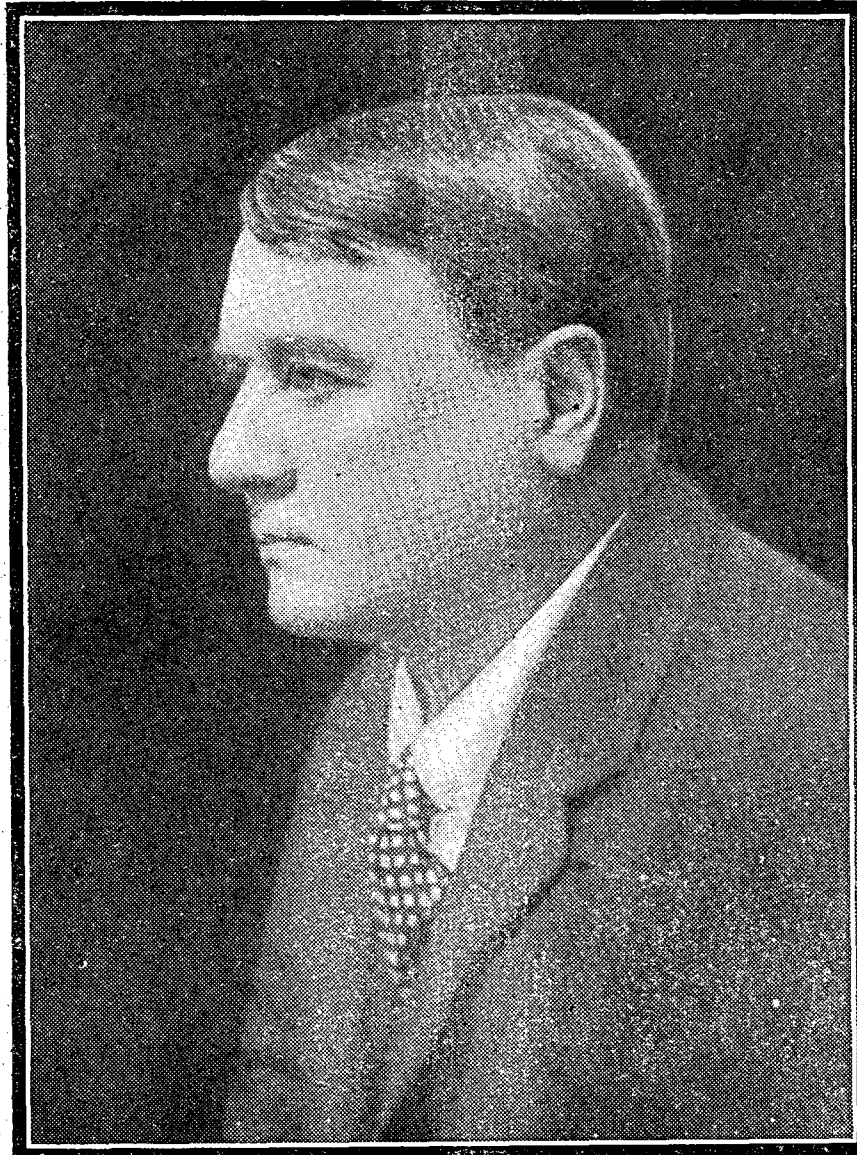
Mr. North has been at work on the problem for eight years, and has at last developed a variety that flourishes in our climate. It has grown and seeded, and the seeds in turn have germinated and produced big plants in trial areas all over Great Britain.

Food for Man and Beast

It would seem, therefore, that we now have a new food-plant which has a thousand uses in manufactures, which gives a valuable green fodder for cattle, and whose bean, ground to powder, yields a flour said to be twice as nutritious as wheat and only half as dear.

Human history might be written round little events like this. We have had wheat in England since the time of the lake-dwellers, thousands of years ago; but the supply was so scanty and costly that wheaten bread was an unknown luxury to the poor less than a century ago. How did they manage to live without potatoes, turnips, and Indian corn?

Alfred Harmsworth



Lord Northcliffe has passed away after forty years of the hardest work a man ever did. He won his way to fame and power. He raised the wages of every journalist in England. He found the newspapers of England dull, and left them bright. See page 6

Columbus brought back maize with him from the New World, as his followers brought back the priceless potato. Holland gave us the turnip and other field vegetables. Until these arrived and were successfully established, we had little winter fodder for our cattle.

In the autumn the animals had to be killed and salted, leaving no fresh meat for the long months separating summer from summer. Before tea, coffee, and cocoa arrived, total abstinence from alcohol was impossible. Everybody drank beer or other fermented liquors, for untreated water, full of horrible impurities, was like liquid death.

In a starving, stricken land our peasants cultivated as much land for corn as is now under that crop, but had little of it. They had no such food as America was to give them in the form of potatoes and maize, little sugar, no quinine, no cocaine to lull pain in the surgery, no foods that they could load into ships' holds to prevent sailors from dying of scurvy at sea. But now

half-a-dozen new growths have given plenty on the land, health and contentment in the home, magnificent health in man-of-war or ocean tramp, and an unending supply of food to fatten the cattle upon a thousand hills, to maintain a ceaseless flow of milk to the dairy, and to feed poultry at scores of thousands of little homes. The result of the successful acclimatisation of new food plants is wealth and increased population.

Perhaps the English soya bean will mark another beneficent revolution, and bring its inventor into the company of those of whom it is said that, by making two ears of corn or two blades of grass grow where one grew before, they deserve better of mankind than the whole race of politicians together.

DEATH OF LORD NORTHCLIFFE

We deeply regret to announce the death of Viscount Northcliffe, founder of the Amalgamated Press and the Daily Mail. An appreciation by the Editor will be found on page 6.

FAME COMES BY A TRAGIC ROAD

MAN WHO DIED FOR HIS WORK

The Great Story Behind a Little Piece of Art

FREEZING TO CLOTHE A MODEL

Marshal Petain, the French general, has been paying a tribute to one of the most pathetic figures in the story of Art. "A true hero," said the art-loving warrior, as he stood before a little bronze statue of Mercury poised in the courtyard of the Paris School of Fine Arts.

The statue is small, yet it is a gem, a great work in little compass for which a devoted life was the price. For nearly sixty years it has mutely told its story and craved the tribute of a tear.

Its author was a young artist named J. L. Brian, rich in talent, poor as Lazarus in this world's goods. He studied by day at the school which his work now adorns, and at night in a dingy garret.

Beauty Amid the Gloom

The cold winter at the end of 1863 found him in the ferment of that rapturous misery which oppressed genius endures. There was the heat of creative imagination in his brain; there was the nip of death in the garret's frigid air. But he worked with unwearying ardour, and with loving fancy his eager fingers clothed in clay the phantom beauty of a shining figure seen only by the artist's mind. In the gloom of that attic this new and lovely Mercury came into being.

Brian regarded his work with delight and fear. He saw before him a masterpiece, his own, but the dark, cold night threatened the ruin of his labour; the icy temperature might freeze and shatter the moist clay of his treasure. He had no means of warming the garret; no way by which he could keep the demon frost at bay and his precious model secure.

Saving a Masterpiece

Yes, there was one way. He could deny himself warmth and safety to clothe this child of his genius. He stripped off his threadbare overcoat and wrapped it about his masterpiece.

Winter froze Paris that night with appalling severity. It entered the silent scene of squalor in which this Mercury stood, and in the morning, when the door of the garret was opened by a friendly hand, beneath a rough old coat stood the little statue, unharmed, and beside it, without a coat, lay its creator, dead.

Students of his old school took the little model for which a life had been laid down; they cast a bronze statue from it, and it stands today, and will remain as long as the place shall last, in the courtyard of the academy where Brian learned to body forth his brilliant conceptions. And there, with bared head, Marshal Petain, victor of many fields, has halted to declare "This man was a hero." Truly he was, a noble one.

THE EBBING TIDE

BRITAIN'S POPULATION MUST DECREASE

Nation Helping Emigrants to Leave the Country

WHO WILL TILL THE SOIL?

For what reasons are we undertaking to pay three million pounds a year to help English and Scottish and Welsh people to leave their homes and go to Canada, Australia, or New Zealand?

Never before has a British Government paid money to get rid of people from Great Britain. What does it mean?

It means that there is not going to be work in factories and workshops in this country for all the people who inhabit it at present. It means that the expansion which began in the early part of the nineteenth century has come to an end, and that the opposite process must now be begun.

At the beginning of the nineteenth century we had a small population of ten million people in England, Scotland, and Wales living principally by agriculture. The result of finding coal and iron close together just at the time when the Age of Machinery had begun made us the foremost manufacturing people of the world. We made railways for the world; we supplied a large part of it with cotton goods; we sent locomotives and other machines of various kinds into all regions of the globe.

Changes of Eighty Years

Enormous numbers of workers were required to make those things. Factories multiplied rapidly. There was work for an ever-increasing population.

We are now forty-three millions. We assumed that we should always be the manufacturers for the world. We let our agriculture sink until it became unimportant. We got most of our food from other countries.

That made Lord Clarendon, one of the ablest Foreign Ministers we have had, call our system eighty years ago "the most artificial the world had ever seen." It would be all right so long as we could go on sending our manufactures abroad in sufficient quantities to pay for our food. What would happen when we were not able to do that, Lord Clarendon said he did not know.

If anyone had told him: "Why, then we shall help our people to go to Canada, Australia, and New Zealand," he would have said "Ridiculous!" Canada was then regarded as a snowy wilderness, Australia as a hopeless desert. New Zealand had scarcely been heard of. That they would develop in eighty years into great countries, needing population, had in 1840 scarcely entered anyone's head.

Colonising England

It is a pity that we should have to urge our people to leave their homes, especially the people whom the Dominions want—our best. They do not want town-dwellers; they want sturdy country folk, prepared to live on the land and make the earth bring forth her increase. We can ill afford to lose these.

Yet they will have a better chance in these new countries. For them the prospect is bright. For us the question is: How are we to keep up our agriculture if the best of our agricultural population go across the oceans?

We must train a new generation of tillers of the soil. We must "colonise England," as that wise man Sir Henry Campbell-Bannerman said when he was our Prime Minister.

Last Month's Weather

LONDON	RAINFALL
Hours of sun . . . 141.7	London . . . ins. 3.85
Hours of rain . . . 59.2	Torquay . . . ins. 3.20
Wet days . . . 22	Newcastle . . . ins. 5.08
Dry days . . . 9	Cardiff . . . ins. 5.49
Warmest day . . . 21st	Edinburgh . . . ins. 3.74
Coldest day . . . 16th	Dublin . . . ins. 2.09

NO WATER FAMINE

Great Storms Save the Situation

MILLIONS OF TONS OF RAIN

The fear of a water shortage caused by the drought of early summer has been quite dissipated by extraordinarily heavy falls of rain.

Though no record was broken, an amazing amount of water fell during the deluge that flooded Nottingham, Sheffield and other towns, and hundreds of miles of country looked as though the sea had invaded the land.

Melton Mowbray seems to have suffered most, and the streets there were like rushing rivers. All the lower floors of the houses were flooded, and water stood in some thoroughfares more than half-way up the front doors. Cattle with only their heads above water had to be rescued by riders on horseback.

Very Heavy Rainfalls

In 24 hours nearly five inches of rain fell, equal to 500 tons on every acre. To get some idea of what this means it may be mentioned that such a rainfall on Salisbury Plain would cover the plain with a hundred million tons of water.

In Nottingham four and a half inches fell, and in Sheffield four inches. Of course, far heavier rainfalls have been recorded in Great Britain. At Lednathie, in Forfarshire, in 1887 two and a quarter inches fell in forty minutes, and at Ben Nevis Observatory in 1890 seven and one-eighth inches were recorded in one day.

These, however, are nothing compared with the rainfall in some other countries. At Brownsville, Texas, in 1886 nearly 13 inches fell in a single day, or about 832,000 tons per square mile, while in the Khasi Hills, in India, 150 inches were recorded in five days, or 30 inches a day for five successive days. At Gibraltar the rain gauge has shown 33 inches in 26 hours, and at Genoa 30 inches in 24 hours.

Sufficient for Our Needs

Of course, it by no means follows that the quantity of water registered is the same all over a particular district visited by a storm, but this month's deluge was very general over an extensive part of England.

While all fear of a water famine this autumn has now passed, it seems scarcely accurate to say, as the Ministry of Health declares, that the recent falls have "virtually made good the effects of last year's drought." The deficit to be made up was eleven inches. Now, the average annual rainfall for the country is about 32 inches, but so far this year only 13 or 14 inches have fallen. While, therefore, we may have sufficient water, not much has been done to make good the deficit of last year. *Pictures on page 7*

PASSING OF A GREAT PATRIOT

Arthur Griffith's Fine Work for Ireland

Ireland has suffered another great loss in the death of Mr. Arthur Griffith, President of Dail Eireann, the Parliament elected by the southern nation.

The sorrows of the sister isle never seem to end. Just at the critical hour, when the new Government is establishing its authority and the services of every lover of peace are required, this man, the real founder of Sinn Fein and the man incomparable in the long and bitter struggle for final peace, is lost to the nation.

A great Irish patriot, he was a man who won nothing but respect from opponents, and it was largely due to him that the negotiations for a Treaty of Peace between England and Ireland were brought to a successful issue.

Ireland's best friends will hope that great strength may come to her in this hour of trial, and that the peace that seems almost within her grasp will be final and effective.

NEWS FROM EVERYWHERE



More tramps than ever are on the roads of England.

A non-breakable disc phonograph record is now on sale in America.

Grease for the wheels of its carriages costs an American railway over a million dollars a year.

Prohibition of alcohol is being strongly urged for Hawaii by United States army officers in charge of the territory.

Four Hundred Beans from One

At Market Weston, Norfolk, one bean plant has produced 132 pods, estimated to contain 400 beans.

The Parson-Dentist

So poor is a Church of England clergyman in Croydon diocese that he takes out teeth in his spare time.

Flying Round London

Flying at 178 miles an hour, Mr. James won the air race round London on a Mars machine with a Napier engine.

A Good Idea

Several United States cities prohibit the sale of hydrogen gas toy balloons, and new non-explosive balloon gas is being used instead.

A Majestic View

The look-out man on the White Star liner Majestic is 180 feet above the water level, and in clear weather has a view of 900 square miles.

A York Boy's Wireless

A C.N. boy in Goodmangate, York, has built a model ship nearly four feet long, electrically propelled, and with a real wireless set working on it.

Not Thrones, but Babies

"I am not thinking of world politics or dynasties," says the woman who was Empress of Austria during the war, "but of a roof over my head and food for my babies."

An Alphabet of Trees

A remarkable avenue of trees has been planted by Sir William Geary, at Oxonhoath, near Tonbridge; from the initial letter of each name the complete alphabet can be formed.

Canada's Huge Industry

The pulp and paper industry is making rapid headway in Canada. There are now 99 mills, employing 27,000 men, who receive a total of about seven million pounds a year in wages.

Hardening Soft Wood

A German in New York has invented a process of hardening soft wood by hydraulic pressure, and it is expected that the invention will have a marked effect on the hardwood industry.

Passion Play's Loss

Hans Mayr, who played the part of Pilate in the Passion Play at Oberammergau, was struck dumb after a recent performance. It will be a year, doctors think, before he recovers his speech.

King Khama

An official report declares that Khama, the native chief of the Bamangwato, Bechuanaland, the oldest king in the world, is free from all responsibility for certain outrages lately committed on a neighbouring tribe.

Kinema on the Train

One of the big American railways has stolen a march on its competitors, by announcing to the first-class passengers on one of its expresses that a moving picture show would be given in the dining car at 8.30 p.m.

British Seaplane Victory

The Schneider Cup, competed for annually by the fastest sea-going aircraft in the world, was won by Mr. H. C. Biard on a Supermarine flying boat fitted with a Napier Lion engine. He covered the course of 200 miles in one hour and thirty-four minutes.

White Ants Attack a Flying Machine

During a test at Agra, in India, of the aeroplane in which Major W. T. Blake is attempting to fly round the world, a new propeller burst, and the airman found that the old one had been partially eaten by white ants—an interesting illustration of the destructiveness of termites, recently described in the C.N.

THE BRIGHT MIND OF A SCHOOLBOY

Alfred Harmsworth's First Paper

HOW HE CAPTURED HIS READERS

Lord Northcliffe was the greatest journalist of all time, and the first paper he wrote for was his school journal, the Henley House School Magazine.

A newspaper then published for boys said of this magazine that "the Editor is a funny dog; we make him our best bow-wow." Certainly the boy had a way of capturing his readers.

We give here one or two bright paragraphs from this schoolboy journalism of the man without whom there might have been no Daily Mail, no Children's Encyclopedia, and no Children's Newspaper.

MRS. S.'S WINDOW

I think if Mrs. S. increased the quantity and quality of good things in her window it would be to her profit.

A LAZY GENTLEMAN

I wish that gentleman to whom a remark was made in our last as to his laziness in the football field would take some interest in our magazine. It seems rather curious that a little fellow like Evans can write a very readable article, and a tall youth of sixteen cannot even give us an acrostic, with which, by-the-by, we are inundated.

A VERY SERIOUS THING INDEED

It is my painful duty to have to report a very serious thing indeed. It has of late been rumoured that most of the boarders and day boys will be rusticated. Rumour says that they will be sent down on the twenty-eighth of the present month, and will not be permitted to resume their studies for at least six weeks. Up to time of going to press, the offence for which this punishment is to be executed had not been made public, but I have it on the best authority that it is for persistently doing lessons during and between the months of May and July.

JOHNNY B. AT THE BATHS

We are often told that "It is never too late to mend," and we know that we are never too old to learn. Have you ever seen a Dowager of ripe years learning to swim under the guidance of *le maître de natation*—puffing, blowing, gurgling, struggling, swallowing, suffocating, and all but drowning? No? Well, the next best thing to it is Johnny B.—he of the pince-nez—at the Marylebone Baths. He is to be seen every Thursday at 5 p.m.

JUMBOS LEFT BEHIND

The Jumbo, the mighty elephant, has really left us, and is probably fast fading from the minds of those whose eyes have already lost sight of him. But have we not many Jumbos left—dangerous things that it would be better to part with? Self-worship, thoughtlessness, untidiness, laziness, cheek, some cowardice, and a little bullying? If we cannot send them quite away from our own country (ourselves) let us at least bind them with the chains of self-control, and keep them within the pale of courtesy.

E. WAKES UP

E. is not a bad boy, but is known as a simple-minded youth, and is very easily led into mischief. He is very sleepy, but wakes up when the holidays draw near.

August 26, 1922

The Children's Newspaper

3

DRIVEN FROM HOME BY A BATTLE

HOW GERMANY GAVE US
A GREAT MAN

Centenary of Herschel the
Astronomer

THE WORK HE DID

By the C.N. Boy Astronomer

It is just a century since the death of one of the greatest astronomers the world has ever known. William Herschel, at the age of 84, passed away on August 25, 1822.

This illustrious astronomer came of an old German family. Isaac Herschel, his father, was an accomplished musician; and William, born in 1738, inherited his love of music.

While still in his teens, young Herschel served in the regimental band of the Hanoverian Guards, but after a disastrous battle in 1757 he made his way to England, arriving in London with half-a-guinea in his pocket. Fortunately, he secured the post of leader of the band of the Durham Militia, and after two years became organist at the newly built Octagon Chapel in Bath, where he entered upon a busy and successful musical career.

Telescope of Pasteboard

In 1772 Herschel returned to Hanover to bring back his sister Caroline, who was installed as his housekeeper. In her diary she tells us that Herschel was already interested in astronomy.

In 1773 Herschel made his first telescope—a pasteboard tube fitted with old lenses. It was good enough, however, to show the moons of Jupiter, and it stimulated in its owner the desire for greater optical power. He hired a small reflecting telescope, and, seeing the advantages of this form of instrument over the refractor, he determined to possess one. Inquiry showed, however, that the cost of a mirror would be prohibitive; so, not discouraged, Herschel started to make one, and in 1778 he reviewed the heavens with his new telescope. In 1780 he forwarded several papers to the Royal Society, and in 1781 he discovered Uranus.

Discovering a New World

The amateur astronomer of Bath now leapt from obscurity into fame. He was invited to Court by George the Third, and was eventually given the post of King's Astronomer. Today the man who found a planet is more famous than the king who lost a continent.

In 1782 William and Caroline Herschel took a house at Datchet, near Windsor. By October 1783 Herschel had completed a new 20-foot reflector. In 1786 he moved to Slough, where the rest of his life was spent. At this time it was his greatest ambition to make a 40-foot telescope, and with the aid of a royal grant the great instrument was completed after two years of hard work.

Breaking the Barriers of the Sky

Astronomy before Herschel's time was a mere branch of mathematics. Herschel, by his development of the powers of the telescope, was able to take the whole of observational astronomy for his province. He enormously extended our knowledge of the sun; his paper on Mars constituted a distinct branch of astronomical science in itself; the scientific study of Jupiter and Saturn may be said to have begun with him.

In stellar astronomy he discovered double stars. He dealt successfully with the problem of the sun's motion in space, and laid the foundations of that great branch of astronomy which deals with the distribution and motions of the stars.

Above all, Herschel enormously widened the mental horizon of man. His researches extended the universe both in space and time; in very truth "he broke the barriers of the skies."

IN THE SNOW LANDS OF THE EMPIRE



Harpooning a walrus with a spear tipped with a walrus tusk



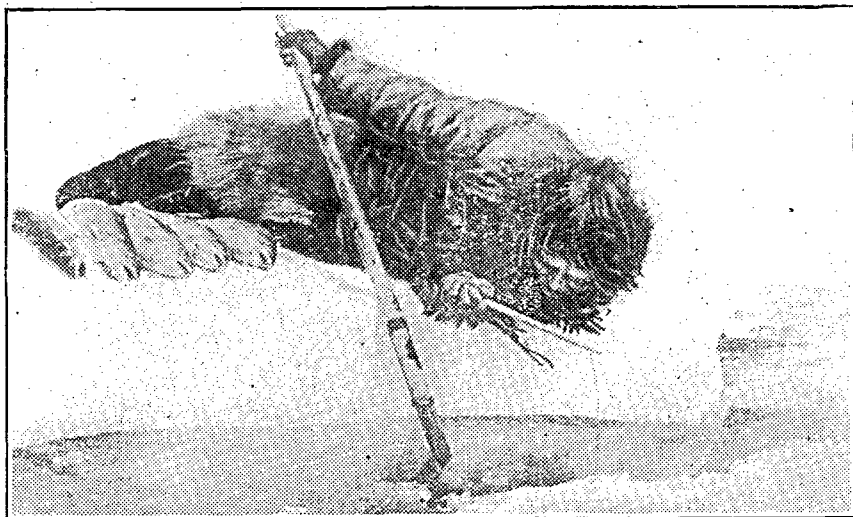
Building a snow-house



Off for a long journey in a skin boat



In winter dress



Fishing through an ice-hole. An ivory line is dangled to attract the fish, which is then speared



A father rubbing the hands of his boy, which have become cold through playing too long with a bow and arrow

These photographs show the kind of life led by the Eskimoes of Labrador, who are among the most northerly citizens of the world-wide British Empire. The struggle for existence in these bleak regions is very severe, but the people are happy

SEALED TREASURES OF PARLIAMENT

WHY THEY WERE
LOOKED AT

The Precious Standards of Our
Weights and Measures

BRASS RULE IN TRAFALGAR
SQUARE

A curious scene was witnessed at the House of Commons the other day. The Speaker and a group of Government officials gathered round a table, and, opening a box, took from it a pound weight and a yard measure, which they examined with as much care as if they were the greatest treasures in the realm. Then they packed them away again.

These objects were the parliamentary copies of the Standard British Yard and British Pound, on which all our weights and measures are based. The examination was a ceremony that had not been performed since 1892, and will not be carried out again for twenty years.

It was in 1824 that the standards were legally fixed. From 1588 up to that year the standards in use were those made in the reign of Queen Elizabeth.

The Standards Lost

Copies of the new standards were sent to different parts of the kingdom, and the standards themselves were handed over to the Clerk of the House of Commons.

Ten years later the Houses of Parliament were burned down and the standards lost, and a strange state of affairs came about. All weights and measures throughout the kingdom were based on the standards, but the standards no longer existed. No one could really say that a pound weight was a pound, and there was no legal standard by which it could be tested.

Fresh standards were prepared and handed over to the Board of Trade. These are the only legal standards for British weights and measures; but accurate copies were made, known as Parliamentary copies, and these are kept in the Houses of Parliament and in one or two other places.

Carefully-Guarded Treasures

It was the copies in the House of Commons that were examined the other day for the first time since 1892. The avoirdupois pound is made of platinum, and is a cylinder 1.35 inches high and 1.15 inches in diameter, with a groove running round into which the points of an ivory fork can be inserted, this being the legal method of lifting the weight.

The standard yard is a solid oblong bar of bronze, on which is marked the length of a yard of 36 inches at a temperature of 62 degrees Fahrenheit.

The platinum pound is kept wrapped in Swedish filtering paper and placed in a silver-gilt case, which is placed in a square bronze case, and this is in a mahogany box, screwed down and sealed. The yard is laid on eight rollers in a sealed mahogany box.

Both mahogany boxes are then put into a lead case, which is deposited in a cavity in the stone wall of the staircase leading to the committee rooms.

When a Pound is Not a Pound

When examined the other day it was found that the Imperial Yard was shorter than it should be by a ten-thousandth of an inch, and that the pound was heavier than it should be by 2.86 thousandth of a grain. No doubt the more delicate tests of today enabled these discrepancies to be noted; or possibly chemical changes had taken place in the standards themselves.

When the oak chest was in position masons closed up the stone wall, and an inscription was placed on the outside, saying: "Within this wall are deposited standards of the British Yard measure and the British Pound weight."

An official declared that the variations discovered were causing concern.

A copy of the standard yard, made of brass, is let into the lower wall of Trafalgar Square, near the National Gallery, where it can be seen by any boy or girl.

A WORLD OF CRYSTALS

SIR WILLIAM BRAGG'S IDEA

New Vista Opened Up of the Infinitely Little

NATURE'S GREAT SIMPLICITY

By a Scientific Expert

A new world is being gradually revealed in a laboratory in University College, London.

It is a world of crystals, coming into our knowledge through the wonderful work of Sir William Bragg and his son. As the work goes on it is becoming more and more evident that nearly everything in the world is composed of crystals.

Take a sheet of notepaper, a fluffy piece of silk, or the leather of an old shoe: all these familiar things are crystalline in structure every bit as much as the scintillating diamond or the exquisite snowflake.

Revealed by the X-Rays

These remarkable revelations have been made by means of the X-rays, and they have opened up a new vista of the world of the infinitely little.

Centuries ago Grimaldi discovered what is known as diffraction. He noticed that when a ray of light struck the sharp edge of an object, such as a shutter, it did not travel in a straight line, but was partly thrown out of its course; its image was, in fact, split up into a number of images. A very few years ago Laue made a similar discovery with the X-rays—that the planes of atoms which compose a crystal deflect the rays; and these rays, bent out of their course by reflection from the atoms, can be photographed, and the photograph shows that a substance is really crystalline.

The Crystal Lattice

Sir William Bragg and his son have carried this work a long way farther and have actually shown how the atoms are placed in a crystal. In fact, Sir William has made up models of all kinds of crystals with pieces of wire and small balls of modelling clay, showing just how the atoms are placed, with chessboard regularity, in hundreds of the crystals with which every chemist is familiar. The atoms are spaced at regular intervals, revealing a wonderful symmetry designed by Nature, and the arrangement shows what scientists now term the Crystal Lattice.

But see what has followed those attempts to build models of well-known crystals. The work has revealed the fact that countless substances never looked upon as crystalline are actually composed of crystals. Take the skin of your own fingers—it is made of crystals; a piece of cotton, a piece of silk—they are composed of masses of infinitely tiny crystals, of which we can today make models, showing, a hundred million times enlarged, just how the atoms and molecules are situated in this wonderful crystal lattice.

Nothing Haphazard in Nature

Day by day, as science advances, we get further evidence of the extraordinary simplicity and regularity with which Nature builds up her materials. There is nothing haphazard in God's work. The electrons, the atoms, the molecules—the invisible little particles of which the world is built—are all arranged with the same careful symmetry that a builder would use in putting his bricks together. And although Nature's bricks are so small that no human eye will ever see them, the X-rays have revealed them, and the beautiful structures built with them, as clearly as you see these words.

It is a world of crystals, and although at first sight it might seem that these new discoveries are merely of scientific interest, Sir William Bragg explained the other day that already many industries had been helped by the revelations of the X-rays regarding crystal structure.

THE THOUSANDTH YEAR

WHY MEN STOPPED BUILDING CHURCHES

Saxon Nave Unspoiled in Essex

GOVERNMENT REMINDS US OF A CURIOUS THING

It is interesting to know from the new volume of the Royal Commission on Historical Monuments in England that one genuine relic of our Saxon builders remains unspoiled in our midst. It is a fine old wooden church at Greensted, Essex.

Very charming is the old nave, built of the split trunks of oak trees. This is believed to have been erected to house the remains of Edward the Confessor as the body rested there on its way to burial in Suffolk.

There are remains here and there of Saxon architecture in England, but very little earlier than the eleventh century, and the reason is deeply interesting.

Invaders Destroy the Churches

The Saxons of old time were over-run in the ninth century by Danes, and war stopped the building of churches. Many of the little edifices which did exist were destroyed by the invaders. Canute rebuilt churches which his father had burned or pulled down, and then the Danes resident here marked their conversion to Christianity by a remarkable church-building era of their own.

But years passed on without the complete renewal of the old Saxon efforts on a wide scale, and then came one of the gloomy marvels of the Dark Ages. People believed that at the close of the tenth century the Millennium was to bring about the end of the world. They were all to be caught up alive and transported to heaven, or heaven was to be extended to embrace the earth, while the wicked were to be judged and for ever condemned.

Men Listen for a Trumpet

Superstition and horror held the land captive. All building ceased. Architecture became for the time being practically a lost art. Men watched the skies for the coming of a sign. They listened for the sound of a trumpet shaking the heaven with its golden notes, and all sound of trowel and mallet was hushed.

The thousandth year ran its course and ended, and then people, to their great astonishment, found that the world continued as before.

Two generations later came the Normans, and the splendour of the Confessor's buildings was a legacy inherited by William the Viking from France. Greensted Church, then, is the only Saxon fane remaining above ground. It stands today very much as it must have stood when Harold, the last of the Saxon kings, knew it, and its parishioners, have a treasure in their keeping which they do well to cherish.

OIL ON THE TROUBLED WATERS

And Also on the Land

Oil on the troubled waters has long been familiar. Now we are to have oil on the troubled land.

The Long Island Railroad in the United States was having a great deal of trouble with dust on one of its important trunk lines, on account of the high speed of the trains and the light quality of the ballast.

With the usual ingenuity of railway engineers, the Long Island experts set to work to devise a sort of oil-sprinkling tank car to coat the road with crude oil, on much the same principle as in a street water-cart.

So successful was this experiment that other United States railways are experimenting with similar machines.

Care has to be taken that none of the oil reaches the surface of the rails.

THE BODY A MAN LIVES IN

What It is Made Of

FOUR SHILLINGS FOR THE LORD OF CREATION

Of all the myriad creations on the earth man is the most wonderful, yet our bodies are composed of the most homely substances, such as can be found in every housewife's kitchen cupboard.

An eminent medical authority states that in the body of an average man there is enough fat to make seven bars of soap; lime enough to whitewash a hen-coop; phosphorus to make 2200 match-heads; potassium in sufficient quantity to make a toy cannon go off; iron that would make two good-sized nails; sulphur enough to rid a dog of fleas; sugar to fill a sifter for the table; as much magnesium as would make a dose of magnesia.

The actual value of the materials of which the lord of creation is made is four shillings and a penny!

THE DIAMOND SCULLS

And the Man Who Won Them

Walter Hoover, an American oarsman of Duluth, has won the highest honour possible for an oarsman, the Diamond Sculls, which are competed for annually at Henley, the greatest of all regattas.

The story of his success as a sculler is the old story of grit, patience, and perseverance. From the first day the ice went out of the little bay on Lake Superior where the Duluth Boat Club has its course, until it froze up in the autumn, he could be seen practising morning and night, day in and day out, rain or shine, calm water or choppy water, under the ever-watchful eye of his coach, Ten Eck.

It is not cheering to see the Diamond Sculls leave our shores, in the wake of so many of our other championships, but it is consoling to know that Hoover earned his victory, and that he is a thorough sportsman. Our Winnipeg Correspondent has competed in rowing regattas with Hoover of Duluth, and a quieter and more unassuming fellow one could not wish to meet.

The rowing game in Canada is resuming its stride again after the stagnation of the war years, and it will not be long before the colours of such clubs as the Argos of Toronto and the Winnipeg Rowing Club will again be seen in the annual struggle at Henley.

FIRST WIRELESS MESSAGE

How Graham Bell waved his Hat

The first wireless message ever heard was sent in February, 1880, to the late Alexander Graham Bell, by means of light waves controlled by an ordinary telephone mouthpiece.

Dr. Bell had invented the apparatus, which was being tried by his friend, Mr. Taintor, in a laboratory a street away.

The message was very much to the point. "Mr. Bell, Mr. Bell" it ran, "if you hear me, come to the window and wave your hat."

Graham Bell did go to the window and wave his hat, for he had heard the words distinctly. Many years later messages were sent three or four miles by means of light waves.

The method is obsolete today, for the much longer waves of the wireless aerial can carry as many thousands of miles as light telephony could carry miles. But the era of talking through space had nevertheless begun.

HALLS OF SPEECH AND SILENCE

HEARING IN LONDON'S PARLIAMENT HOUSE

Great Difficulty that is Always Coming Up

ROOM IN WHICH TO HEAR YOUR HEART BEAT

It is no new thing that a great room like the Council Hall in the new London County Council building should be found a very bad place for hearing. The same defects have appeared in many parliament chambers, in churches and halls, and in nearly all cathedrals.

When a hall has to be constructed so that speakers in any part of it can be heard in other parts the difficulties are increased; they are lessened when a speaker stands in a fixed place, such as a rostrum or a pulpit, and has to make himself heard in other parts. His efforts can then be aided by a "sounding board," which reflects back the sound waves of his voice so that they will travel toward his audience.

Mingling of the Waves

The whole difficulty arises from the fact that a voice singing or speaking in a room sets up waves of air, and that these air-waves are reflected back when they reach the surfaces of the walls, ceiling, or floor. Moreover, they may, in a very large room, be reflected back and forth more than once, and the going and returning waves mingle, causing confusion to the ear.

In America, which is a new country, and so has more new halls than old Europe, they have set about trying to find what are the best shapes for such interiors, and a science of architectural acoustics has sprung up. It has been calculated what shapes and dimensions of halls are best for hearing.

Egg-Shaped Halls

The best of all is egg-shaped; if the speaker stood near the narrower end of the oval everybody would hear him perfectly. Next in order is a long, octagon-shaped hall with the greatest length of the octagon at the sides. If the octagon is split down the middle the half-octagon—something like a D but not with curved outside corners—is a good shape. So is a long, narrow, rectangular room twice as long as it is broad and high; but the hearing in this depends on where the speaker stands.

A T-shaped hall is bad, and a cross-shaped hall very bad indeed, which is one reason why the hearing is so bad in a place like St. Paul's Cathedral. There are one or two shapes worse still, and there are architectural additions which make them even worse.

A dome in the middle will do so; and so will circular corners or curved spaces let into the walls. That is because these spaces form pockets in which the air, which is the most elastic thing possible, acts as a resonator.

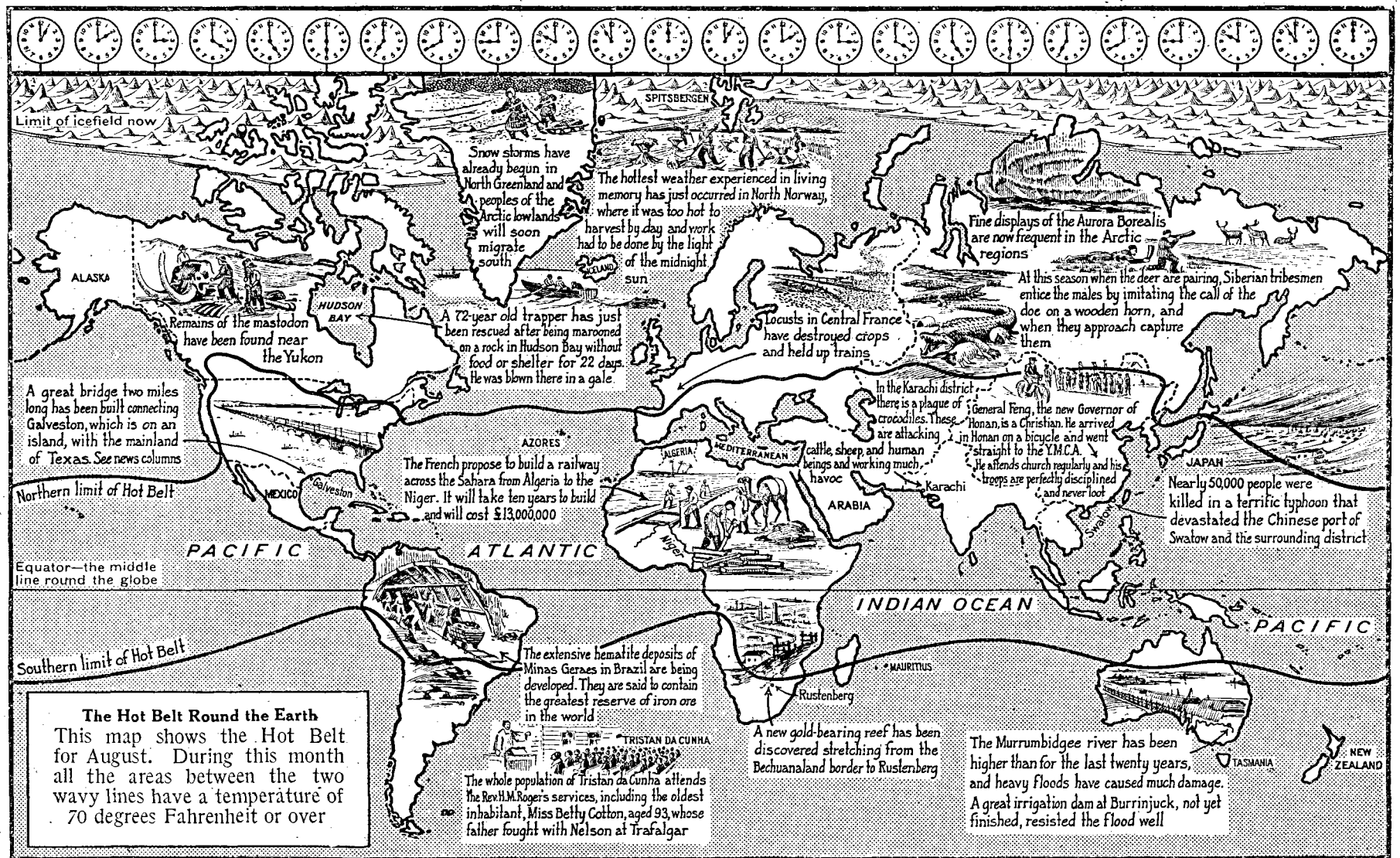
Both in America and Europe many devices have been sought to stop these reflections of sound waves and hinder the resonances.

Breaking Up Sound Waves

One idea was to string systems of wires about the halls to break up the sound waves, but that is useless. A more reasonable thing to do is to cover the walls with something that absorbs the waves instead of reflecting them. Velvet or woollen stuffs do so; a woollen curtain stretched under a dome or across a curved recess would do much, and so would woollen curtains hung down like banners across a hall.

In the University of Utrecht, in Holland, there is a "perfect" room which is shaped like a cube; but its perfection is obtained because it has walls that completely absorb sound waves. They are made of a top layer of horse-hair felt; behind that is porous stone, then wood, then ground cork and sand; and then another stuff called karkstein. In this room you can hear your own heart beat.

PICTURE-NEWS AND TIME MAP SHOWING EVENTS ALL OVER THE WORLD



WHERE THE LEGIONS LANDED

Port Made by the Romans EXCAVATING RICHBOROUGH

Richborough, the port on the south-east coast of England, came into notice during the Great War. It was transformed from a deserted beach and marsh into a harbour with docks and barracks and warehouses.

But Richborough figured in history even more conspicuously long ago. Here was the port at which the Roman legions landed and embarked during their long domination of Britain. For nearly 400 years it was a busy town.

All sorts of remains have been dug up there from time to time. The number of Roman coins found reaches 140,000.

Now a systematic excavation of the site of the Roman city is to be carried out by the Society of Antiquaries, and it is hoped that our knowledge of the Romans in Britain will be increased.

FRANCE AND HER TROOPS

More Armed than Pre-War Germany

A much-esteemed French reader of the C.N. writes from the heights of the Pyrenees challenging a statement in the C.N. monthly, where it is said that France is in a more advanced state of military preparation in 1922 than Germany was in 1914. "This is false," our correspondent says.

Perhaps it is well, therefore, to give the actual figures on which the article in My Magazine is based. They are:

Germany's Army in 1914 672,000
France's Army in 1922 736,000

Pronunciations in This Paper

Abacus Ab-a-kus
Clemenceau Klay-mahn-so
Croesus Kroe-sus
Eisteddfod Ays-teth-vohd
Utrecht U-trekt

BRIDGE TWO MILES LONG

Roadway Across the Sea

A great bridge, over two miles long, joining the island on which the City of Galveston is built, in the Gulf of Mexico, with the mainland of Texas, has been completed, and is now open for traffic.

Its total length is 10,685 feet, and its width 63 feet; and it has, in addition to a fine roadway for motor traffic, tracks for steam and electric railways. It is supported on 107 arches of steel and concrete and cost nearly a million pounds to erect.

The greatest engineering skill has been exercised to make the bridge absolutely safe against the fierce storms that assail this region from time to time, and every arch is supported on a foundation forty feet below the water.

To enable ocean-going steamers to enter Galveston Bay from the Gulf of Mexico a giant lift-bridge is fitted at one end of the causeway, which can be opened or closed by the touch of a lever.

The bridge is one of the finest and longest in the world. See World Map

WHO WERE THE IBERIANS?

Discovery That May Tell Us

The news that near Saragossa, in Spain, an Iberian citadel has been discovered arouses hopes that something more may be learned about the mysterious Iberian race which is said to have been spread over large parts of Europe before the Celtic races invaded it.

This theory supposes the short dark Highlanders of Scotland, and the small swarthy Welsh folk, and the "black Irish," to be descendants of Iberian stock, as well as the Basques of Spain.

Other authorities maintain, however, that there was no Iberian race.

A number of Iberian coins and inscriptions exist, but they still await the man who will show how to read them.

As the discovery of the key to the Egyptian hieroglyphics revealed to us the life and history of the people of Egypt, so it may be that finds near Saragossa will tell us how the Iberians lived.

FRIEND OF LINCOLN

Centenarian Who Thinks All is Well

There is a man still living who spoke with Abraham Lincoln only a few hours before the pistol of a madman put an end to one of the greatest lives in the history of mankind.

Senator Cornelius Cole has just reached his hundredth birthday. He has had a useful and interesting career, and can still talk with vigour and liveliness about the affairs of the day.

Lincoln, he says, was not by any means a rough, unpolished man, as is often suggested. In appearance he certainly was gaunt and uncouth, but his manners reflected his mind; they were always courteous, kindly, considerate.

Mr. Cole is not like the old people who think everything is wrong which did not exist in their young days. He believes in young people; he thinks they are healthy both in body and in mind. He believes in women having votes, and thinks they will use them to good purpose. He is a grand old man, and we cordially wish him many happy returns of his birthday.

THE LUSITANIA

A Floating Memorial

Considerable support is being given to a proposal to anchor a floating memorial over the Lusitania's grave, and a French sculptor has submitted a design.

It is to represent a mother adrift on a raft with her child, and will be eighty feet high. Provision would be made to have the memorial illuminated at night.

In the Auction Rooms

The following prices have lately been paid in the auction rooms for objects of interest.

A silver Irish potato-ring, of 1771 . . . £115
A William and Mary plain tankard . . . £71
One of Sir Walter Scott's desks . . . £32
Seventeen letters from Carlyle . . . £15
A receipt signed by Handel, 1715 . . . £13

COUNTRYSIDE PEST

City's Refuse Dump LOCAL AUTHORITIES UNABLE TO STOP A NUISANCE

One of the scandals of the countryside within twenty or thirty miles round London, especially in Kent, is the way in which private firms are allowed to dump their filth and rubbish in the middle of a farmer's field. Very often life in houses near these fields is quite intolerable.

Much has been done to stop this evil business, but a very striking case is mentioned by the Medical Officer of Health for Dartford Rural District.

Early last year a private firm started to dump London refuse in an old chalk pit, within 200 yards of the homes of about 400 people. Thousands of tons of refuse were deposited, the dump caught fire, and the smoke and flies were an intolerable nuisance all the summer.

The Council applied for an injunction, but the judge merely ordered the refuse to be covered up, and, though the case came repeatedly before the court, no relief was obtained.

The trouble has now been stopped by the expiry of the contract for the refuse, but it seems deplorable that a public body should be powerless against a nuisance of this kind. It has now been ordered by the judge that those responsible for the refuse should pay the costs of the trial, but it is surely time that the Ministry of Health gave a local authority the power to keep its people healthy and save them from the presence of an offence to comfort and a peril to health.

Dr. Richmond, in his report to the Dartford Council, makes the interesting suggestion that the health of children is now much improved in summer owing to the fact that the roads are tarred and dirt and dust are no longer blown about as in years gone by.

CHILDREN'S NEWSPAPER

AUGUST 26 1922

God Bless the Laundry Girls

THOSE who have been to see Loyalties must have been thinking very hard about the word.

In Mr. Galsworthy's play we are shown different kinds of loyalties at war with each other: we see the man who will be loyal to his friend even at the expense of truth, and the man who will be loyal to his honesty though it involves another man's ruin, while class and race loyalty come in to complete the confusion.

Few spectators can have left the theatre unmoved by the power of this thing, this invisible thing, which no scientist can get under his microscope, and no materialist can explain—this spiritual force which leads men to lay down all the sunlight and sweetness of life and die at the scaffold or on the battlefield, loyal to an idea.

Not only does Mr. Galsworthy show us the power of loyalty; he hints that we should examine our own loyalties. Where are they unworthy? Where are they sentimental? Where are they blind prejudice?

Perhaps the most beautiful loyalty of all is the loyalty of the poor. Everyone who has lived among them pays tribute to the wonderful kindness of neighbours when misfortune falls on a working-class home.

Our Country Girl tells us of a girl who has been taken to hospital with dropsy. Her home is in London, and she has been working at a small laundry in a seaside town for only a few days. Under the Health Insurance scheme she gets twelve and sixpence a week, but the hospital charges her a pound, and the difference is made up by the girls who for so short a time were working with her.

A few pence means a great deal to these girls; it means the price of boots, of soap, of darning wool; it means sacrificing the little they could put by for winter clothes; it means that when they return tired from work, to a crowded home hung with steaming washing, they cannot escape to a comfortable seat at a cinema.

Nevertheless the girls are going without these necessities and luxuries so long as the invalid is in hospital. She is not an old friend; she has no claim on them; but she is a working girl like themselves, with just as little as they have between self-respect and the workhouse—just that frail wall of health. Her wall has tumbled down, and they will help her to build it up, for who knows when their own may crumble?

Is it not fine, the thought of these girls and this loyalty? The whole world would be better if our statesmen had more of it.



THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London

above the hidden waters of the ancient River Fleet, the cradle of the Journalism of the world



Still True

EVERY day men get wiser. A British general has been declaring that he went into the army believing that if you want peace you must prepare for war, but now he believes that if you prepare for war you will get war. It has been true, ever since the Bible said it, that grapes do not grow on thistles.

The Charabanc

A LONDON magistrate understands that some counties are trying to prevent charabancs from using their roads.

Would it not be more practicable to stop the tyranny of these vehicles by insisting on a conductor for each one? It is beyond reason that the driver of a charabanc, with thirty or forty lives in his keeping, should be expected to keep his passengers in order; but it is beyond reason, too, that these passengers should be allowed to throw bottles into the road, as they do; or that the drivers should block up a country lane, as they do.

It seems to us the instant duty of all local authorities to insist on the immediate appointment of a conductor for every charabanc on the roads.



The Rain It Raineth Every Day

Thank goodness one member of the family goes serenely about her business

The Team

THE Cambridge captain was within ten runs of his century. It was the great match of the year, the story of which would be recalled long afterwards. He had made a century last year. A few minutes more and he would win great glory for his name!

But could they get Oxford out within the time if those few minutes were taken? They might not; they must not run risks. So he "declared," and the innings was ended. The captain gave up his record, but he won the match. He could have won it anyhow, even if he had stayed a little longer, but he did not know that. He put the team first. Of course! That is cricket as the true player thinks of it.

The game is more than the players of the game, And the ship is more than the crew.

How to End War

DEAN INGE is right in saying war is not good business, but it would not be excusable even if it were. What is more important is that it is not good Christianity.

What is criminal in the individual cannot be a virtue in the nation, and a Government that deliberately makes war degrades itself to the level of the burglar, the hooligan, the murderer.

When the peoples of the world realise that, they will no longer reserve the gaol and the gallows for minor ruffians. Once the makers of war are sent to the gallows, war will soon go out of fashion.

Tip-Cat

CHILDREN, according to a doctor, should always have their sleep out. Surely not if it rains?

THE world, we are told, has a short temper. That is why it never keeps it long.

WHEN a person wrongs you, drop him. But don't fall out with him.

THE Kaiser is going to publish a book. The melancholy days are coming.

THE jam trade is doing badly. It must have had a nasty jar.

THEY say a poor man can be happy. But a happy man cannot be poor.

MAETERLINCK says it will be much easier to die in the future. We are willing to wait.

The Holidays

By Peter Puck

A SCHOOLMASTER said, "I am saddled With youngsters whose brains must be addled,

But six weeks at the sea

Make me hum like a bee."

And he tucked up his trousers and paddled.

The Gentleman

A CORRESPONDENT asks us, "What is a gentleman?" It is hard to say in a word or two.

It is true, as a writer said the other day, that Great Britain has formed the type of man known by the name of gentleman, but that is not the name he puts on his visiting card, and you cannot tell him by his dress.

You cannot be born a gentleman, for it is not a hereditary honour; it is a fine old title, and the only one that money will not buy. To win it you must be fair and truthful in all your dealings, gracious in your manners, and always kind and considerate of the wishes and feelings of others.

You cannot be a gentleman unless you are a gentle man.

Lord Northcliffe

By Arthur Mee

WHAT is it that happens when a light goes out? So simple a thing, yet all the world is changed. It was light; it is dark. It was sunshine and brightness; it is shadow and mystery.

A great light has gone out in Fleet Street. Never again will his feet tread this street he loved so well. Never again will he stand, with the delight of a child, and watch the newsboys running with armfuls of his papers.

There are millions of people who never agreed with him; there are very few who always agreed with him; but there never was a man who sowed ideas on the world's highway as he did. If he be a nation's benefactor who makes two blades of grass grow where one grew before, what is he who makes two thoughts come where none came before? He made journalism bright and fine.

Waiting His Time

Looking back, now that he is gone, the memory throbs with days of long ago. There never was another brain like his, seeing so quickly, so far. Its three thousand million compartments were crammed with knowledge, steeped in inspiration. He was a living encyclopedia with colour and glow on every page.

He would give a man a thousand a year to sit and wait until something turned up, and if the man grew tired of drawing his thousand for nothing, he would smile and say: "What is a thousand a year compared with what you are going to do some day?" He waited his time, and in the end there began that long run of educational journalism which brings in the Children's Encyclopedia and the Children's Newspaper, two of the supreme successes of the journalism he had brought to life and being.

He would come into a room and find an editor upset by a sad mistake, wondering if his paper would be ruined; and all would be calm when he went out again. "I have made many mistakes, and shall make some more," he would say, giving his little editor a hug to comfort him.

Courage and Faith

It was a stupendous imagination, a brilliant courage, and a boundless faith in ideas which made him the greatest journalist on Earth.

We shall march on, in the ways he taught us, but never will our little world be quite the same. One thing we feel—that a great, bright mind like his, a big, loving heart, a mighty faith, do not pass away. Somewhere in God's great scheme of things his powers will spend themselves again.

So we go onward and forward, remembering what lies behind, believing in what lies before, though with something of the feeling of Walt Whitman for our lost captain:

Exult, O shores, and ring, O bells!

While we, with mournful tread,

Walk the deck our Captain lies,

Fallen cold and dead.



CAN WE SURVIVE? PERILOUS CONDITION OF EUROPE

Hushing Up the Bankruptcy of Business

MILLIONS OF UNPAID INCOME TAX

By a Special Correspondent

Serious difficulties have arisen concerning the settlement of what is known as the Reparations Question—the making good by Germany of the damage done in the war; yet the necessity of a settlement becomes daily more urgent.

In the spring of last year one of the greatest manufacturers in the North of England warned me that the spring of 1922 would find the nation in a state of gravest peril.

I have just parted from this far-seeing and outspoken man after a conversation so simple that every child can understand it, yet so important that it deserves the attention of the world.

"Well," he asked, "has time proved me a good prophet?"

I said that it was true there had been no recovery in trade, but that I had rather gathered in 1921 that he anticipated numberless bankruptcies in the spring of 1922.

Living on Overdrafts.

"They have occurred," he replied, to my astonishment; "and they are occurring every day; but they are hushed up. Who hushes them up? The banks. The banks of this country are carrying some of the greatest businesses in this country. There is a state of almost general bankruptcy. All of us are living on overdrafts at the banks. We pay our wages, our rates, and our crushing taxes by overdrafts.

"What does it mean when we read in the paper that income tax for this year remains unpaid to the tune of £65,000,000? It means that we are only carrying on business by a fiction. The Government dare not sue for this money.

Country's Real Danger

"The banks dare not press for repayment of their loans. If one firm goes, all may go. The real peril of this country, one which may yet involve the whole world in ruin, is not so much a commercial crisis as a financial crisis.

"This is the truth, which has not yet begun to affect statesmanship. What steps are we taking toward disarmament? What steps are we taking to abolish dissension and hatred? What steps are we taking to establish a rational world order with a free interchange of goods and services? What steps are we taking to cut down our national expenditure to a barest minimum? We are doing absolutely none of these things."

Signs of Improvement

I asked him if he saw no signs of improvement in trade.

"Yes; there are signs of improvement," he replied; "and that brings me to the state of the public mind. What our statesmen appear to shirk, the working classes are now pondering in their hearts. There is a realisation of the truth on the part of responsible trade union members. They see that their peril is a smash of the credit system on which we are all living; they perceive that a collapse of the banks would involve them in utter ruin; and so they are working hard to avert it. That is the one

THE MAN WHO WOULD NOT GO

WHILE France is passing through these years of crisis and anxiety her oldest statesman of world-wide fame, one of her strong men in the war, lives quietly on, almost alone. He is Georges Clemenceau, of whom a story has just been told in the French papers.

Although Clemenceau has been one of the most popular men in France, he has made many enemies in the political world by his rude treatment of even important people.

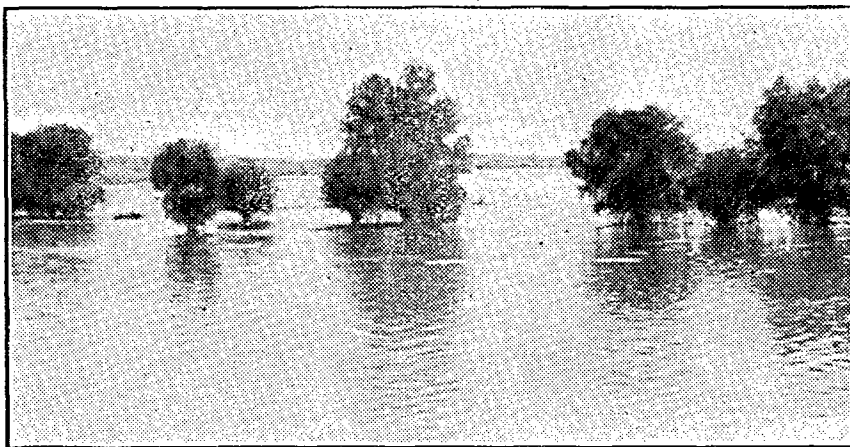
One morning a senator called at Clemenceau's own apartment, and said he wished to see him. The Tiger, as he is called, ordered his valet to tell the visitor that, being very busy, he requested him to call again the next day. But the visitor insisted. "It is about something very urgent," he said. "I can't possibly think of waiting till tomorrow. Will you at least take this note to your master?"

The visitor scribbled on a card the object of his visit, and once more the valet faced his terrible master, who stormed: "My secretary is there, is he not? Well, take this to him, and please leave me alone!" Then Clemenceau handed back the card, on which he had just added: "Send off this old bore on the spot."

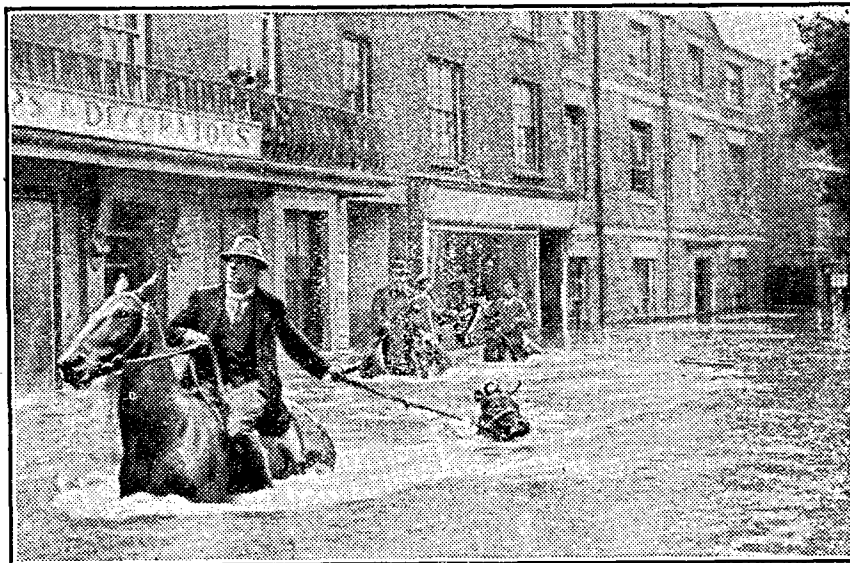
The valet went to look for the secretary, but could find him nowhere, and at last came back to the waiting-room. Then, showing the card to the caller, he excused himself by saying: "What a pity! The secretary is out. But Monsieur Clemenceau added something on your visiting card; it must be the answer. Here it is."

The senator took the card, read it, and, flushed with anger, asked nothing further; but since that day he has been among those who will never forgive Georges Clemenceau.

THE DELUGE COMES TO ENGLAND



A Nottinghamshire landscape becomes a waste of waters



Rescuing the cattle in the flooded streets of Melton Mowbray

An amazing deluge of rain visited England the other day and flooded miles of the countryside, beside turning the streets of towns and cities into rushing rivers. These pictures give some idea of the enormous amount of water that fell in a few hours. See page 2

Continued from the previous column

sign of improvement in trade which gives me hope. I can say with confidence that in many of our greatest industries the shirkers have been thrown out and the genuine men are beginning to work honestly and well."

"But what is the use of their hard work," I asked, "if you have no foreign markets for their production?"

"Ah, that is a fallacy!" he exclaimed. "Poor as the world is, it wants goods, and it will buy our goods if we can sell them at a poverty price. To do that we must produce cheaply, and to do that we must work much harder. The workmen begin to understand that manufacturers complain of high taxes and exorbitant rates because all these charges add to the cost of the goods which they themselves produce. If wages come down, so that we may sell

cheaply to a bankrupt world, taxes and rates must also come down for the same reason. Our business is to produce goods so cheaply that a hungry and barefoot customer can buy them."

Here, surely, is a goal to which all of us should press, the oldest and the youngest. We want a new spirit in Great Britain, a new idealism. We must practise the same wonderful self-sacrifice which made so many of the fields of France "for ever England." We must proclaim the good tidings of love and denounce the barbarous counsel of hatred and suspicion. We must all take off our coats, roll up our sleeves, and bend our backs to lift the brotherhood of man from the trampled ruin of war.

If this new spirit does not animate our national life from this time forward nothing can save us from unimaginable calamity.

SAVING THE RHINE A VICTORY FOR BRITISH FORESIGHT

How Europe was Delivered from the Folly of Clause 358

PEACE TREATY CANAL

By an Economic Correspondent

In the year 359 A.D. 800 cargoes of British corn passed up the Rhine to Roman granaries built on its banks.

Ever since those far-off days an incalculable quantity of British merchandise has passed from the Thames to the Rhine, making its way all over Europe from Rotterdam, Cologne, Strasburg, and Basle.

By Clause 358 of the Versailles Treaty, France was granted the right to build a canal for about 80 miles alongside this famous river, which is of the very greatest importance to British trade.

A Big Scheme

The suggestion looked innocent enough. France wanted water from the Rhine for electric power-stations. The scheme would involve the handsome expenditure of £40,000,000 to £80,000,000 and would employ a host of men for 20 to 40 years. Could anybody object to a project so beneficent and so obviously productive?

Happily, there was a man in London who has made waterways his life's study, and who saw at once the formidable peril of this scheme to British trade. It meant the diversion of water from a navigable, but shallow, international river to a purely French canal, which would not be concerned with traffic and which would have to possess many locks.

Deepening a River

He saw that the wise thing for Europe was to spend money on deepening the shallow parts of the Rhine and making it navigable for larger barges, and for the whole year, instead of for 200 days in the year. In any case the project for a canal had to be fought until its menace was removed, for the canal meant the ruin of the Rhine.

He has been fighting ever since those days with many able men of business on his side, and at last his foresight, tenacity, and quiet reasonableness have scored a great victory.

The Rhine will not be put out of business as a navigable river. The canal is to be a tiny thing of two miles and a half. The control of this small canal is to be in the hands of an international body. And the mighty but variable Rhine is to be regularised for the benefit of all the nations fed by its wandering waters; it is to be improved, not ruined.

Blessing to Europe

The credit of this great achievement belongs chiefly to Sir Joseph Brod-bank of the Port of London, who has just been appointed to the honorary position of Commercial Adviser to the British representative on the Central Rhine Commission. It is a part of his triumph that he has saved that fatal Clause 358 from ruining Switzerland and shackling British commerce without making a single enemy among our French friends. Surely he may be numbered among the diplomatists!

It is a good thing for this country, whose trade with Switzerland alone amounted to £40,000,000 even in 1920, that it numbers among its quiet citizens men of statesmanlike vision and a steady persistency of purpose.

To have saved the Rhine is an infinitely greater blessing to Europe than many victories with the sword.

CLEAN AND HAPPY WORLD

WORK AND HEALTH

Still Enormous Room for Improvement Everywhere

SAFETY, CLEANLINESS, AND BEAUTY

By Our Industrial Correspondent

A great deal of hard work has to be done to maintain civilised life. Much of it is difficult and arduous, and some of it involves the handling of dangerous machinery, of poisonous compounds, and of materials which create disease.

We have also to remember that there is an intimate connection between the workplace and the homeplace. If the worker goes home dirty from his work he spoils and defiles the home which ought to be his comfort, and by so doing he makes unnecessary work for his wife.

If we want to make it a happy and clean world we must give more attention to the conditions of labour.

With the matter of safety the C.N. has dealt already. Not enough is yet done to guard machinery and to give plenty of space in which to move round about it. Some old factories are so crowded that men and women are compelled to pass too close to whirling wheels.

Shower Baths for Workers

Only less important is cleanliness. The writer, when on the Continent some years before the war, was much struck with the care taken in many cases to secure the comfort of those engaged in doing dirty work.

For example, there was a certain city gasworks employing a large number of men. The work which, of course, made it necessary to handle coal, was both arduous and dirty. Yet the gasworkers went home as clean as though they handled silk instead of coal.

Each worker was supplied with a locker in which to keep his ordinary clothes. As soon as he arrived at the works he changed into special working clothes. When his day's work was done he went to a fine lavatory, fitted up with shower baths and good washing basins. Here he had a comfortable and refreshing bath, which changed the fatigued man into a glowing and comfortable citizen. He then put on his everyday clothes again, and went home.

Safety First in Clothing

Thus also with other dirty jobs, such as coal-mining. It is a reproach to us to think that whereas in Silesia the miners have baths at the pit-heads and go home clean, our own miners take home the coal-dust, and have to bathe in their own little homes, making a condition of continual toil and hardship for the women.

Laborious work should always be done in working clothes. The usual way, unfortunately, is for the worker's suit of clothes to descend in the scale from being a "best" suit to a "working" suit. How much better to keep ordinary clothes for ordinary wear, and to use special garments or overalls for the hours of labour. Special close-fitting working clothes are not only very becoming, but are safe, because nothing flaps about to catch in the machinery.

Wearing Gloves at Work

A minor, but important, item is the wearing of gloves in some occupations to protect the hands. The wearing of working gloves is common in America, and ought to be common here.

Another point of importance in industrial work is the provision of scientifically designed seats made to give the worker the greatest possible comfort.

Can we afford to do such things? There is a very cogent answer to this question: it pays to attach to work conditions of comfort and cleanliness. The comfortable worker produces better work than the uncomfortable worker. To study safety, cleanliness, and beauty in labour is to study profit.

WAY DOWN IN SOMERSET

ROBIN REDBREAST AND A LADY

How He Came Into a Home and Made Friends

INTRODUCING THE FAMILY

A Somersetshire lady sends us a charming account of robins that have given her great pleasure as pets.

For over eleven months I enjoyed the delightful companionship of a pair of robins.

It began by a robin looking in at the window with that turn of the head which makes a robin so fascinating and inquisitive-looking. Having some crumbs in the room I put them near him on the corner of my dressing-table, and wondered: Will he? Won't he?

Soon he came for them, and from that day he flew in and out every day. By degrees I coaxed him to eat out of my lap and out of my hand.

Generally on his way out he stood on the upper window frame and gave me a joyous carol, as if by way of thanks.

Robin Brings a Friend

He usually came in at the bottom of the window, and flew out at the top, and if on a cold day the spaces were narrower, he seemed much annoyed. When the mornings grew brighter he would stand outside till the blind was raised.

He would stand on the toe of my shoe and sing, take crumbs off my shoulder as I lay on the sofa, and, perching above me, look down at me, and seem to be asking questions.

One day, in early spring, I heard a particularly joyous song outside, and there he was with a second robin, a stranger.

"I see," I said. "This is your little wife, and you are introducing her and showing her round." She came in, and they flew round, perching here and there, he showing her several places where he could always find his crumbs. He then conducted her out, but stopped to sing his thanks.

A Busy Family

From that day she began to come several times daily, and a little later hurriedly and feverishly, with a very responsible air, which clearly proclaimed that the family was hatched.

Then an extra busy life began, and for weeks the wee things slaved all day, she coming for the crumbs while he foraged outside. Owing to his heavy cares at this period he seldom came.

Then one morning she flew to her usual perch and called coaxingly, and after in a tone of command, and I knew she wanted to present her family to me. Looking down, I saw four fat balls of brown feathers laboriously using their beaks in the grass.

They continued coming for some time longer, and then her visits ceased; soon he came alone and sang his last song. There was no sign of a tragedy near, so I hope they only made a change of neighbourhood.

NEW RAILWAY ENGINE

Driven Like a Steamship

An interesting new engine being used on the Swedish State railways is driven by turbines like a steamship.

The turbo-engine carries its driving machinery behind it under a tender, quite unlike the turbo-engines so far made; and seven tons of coal are carried in bunkers on both sides of the cab.

The exhaust steam is conveyed to a condenser fixed on the tender, and the water being thus used over and over again, the deposit of scale in the boiler is almost done away with. Driven by the turbine are fans for producing the air needed for cooling.

This new turbo-engine uses less than half the amount of fuel usually burned by an ordinary locomotive with reciprocating engines.

GOOD HEARTS AND BUSINESS HEADS

An Example to Copy

STORY OF THE 8.50 TO MANCHESTER

A correspondent living outside Manchester tells us of a movement there by business men which deserves to be more widely known.

The 8.50 train brings into the city from Radcliffe a daily contingent of men who have organised themselves as the 8.50 Club. They began, some twenty years ago, to fine any one of their number who lost his usual train, made a stale joke or a ridiculous pun, or acted stupidly in business, and the fines were spent in buying clogs for poor children.

Now the club is launching out on a larger scale, and not long ago it sent 81 boys to the Manchester Boys' Holiday Camp at Southport, where 250 boys enjoy themselves each week.

There must be many morning train-loads going cityward to business who would feel friendlier, better, and happier men if they followed in some way the example of this hard-headed but kind-hearted Radcliffe contingent of Manchester business men.

THE ADMIRAL AND THE PAPUANS

Why Need They Die Out?

Gallant Admiral Moresby, who died at a very great age not long ago, gave his name to the capital of New Guinea, or Papua as we should call it now; and no one better earned the honour, for he was a friend of the Papuans, as well as a true Englishman.

Nearly fifty years ago now, when he was a young sailor, he wrote a wise book called "Discoveries in New Guinea." People were saying then, as they say now, that the natives of such islands must die out; but Captain Moresby flatly denied this. He said that Nature had not done so foolish a thing as to create millions of beings in the form and with all the powers of man, without having any room or use for them.

These races, he added, have not perished by Nature's decree, but because of our weakness, ignorance, and sin. It is not Nature that sends spirits and carries foul diseases, before which so many fall.

The brave old admiral added that some of these despised natives had died martyrs to their convictions as truly as Stephen or Paul. The world cannot do without such men, and need not do without them.

BEWARE OF A BEETLE!

State Paper About an Insect

In a circular from the United States Department of Agriculture it is announced that a certain Japanese beetle has been found in a nursery garden in Connecticut.

An insect, a tiny beetle, of what interest can this be to the world?

The interest is this—that this beetle, having got into Hawaii from Japan, some ten years ago, attacked the sugar canes there and did a great deal of damage. It was necessary to send to Japan for a consignment of much smaller insects, which live on the beetle and destroy it, before the danger to the sugar crop could be turned aside.

There are no sugar plantations in Connecticut. That State is too far north for growing what needs a semi-tropical climate. But the beetle may attack other plants, and it will have to be carefully watched.

That is why the Department of Agriculture sends out a notice about it. A very small creature to occupy the attention of a vast branch of the American Government, but a creature capable of doing a great deal of harm.

C.N. COMPANION

WHAT A SHILLING BUYS FOR YOU

Things and People and Places of All Ages

ALL ABOUT CROESUS

While the Children's Newspaper keeps its readers abreast of the events of our time, the C.N. Monthly, My Magazine, throws light upon the people and places and happenings of all time.

If you have not ordered the September number from the newsagent who supplies you with the C.N., you should do so at once. Here are some of the interesting articles you will find in it.

The discovery in Asia Minor of thirty gold coins of Croesus has suggested a vivid sketch of the life of the people of Sardis, where the coins fell out of a vase in a tomb in the sixth century B.C.

It was in Sardis that Croesus was besieged by King Cyrus of Persia, about whom we read in the Bible; and a pathetic touch is given by the story of the deaf-and-dumb son of the defeated monarch saving his father from death. His anxiety gave him power of speech for the first time in his life.

London Sixty Years Ago

Next there is a most entertaining sketch, by Mr. Stephen Paget, of London sixty years ago, when Mr. Paget was a child. Now there is more equality, more fellowship, fewer class distinctions and class hatreds; but life was quieter then, less crowded, more content. On the whole, however, the present time is better, Mr. Paget thinks, especially for children.

Children, then, were set to work in mines or factories at a fearfully early stage; it was mere slavery. Most people were rather indifferent to the health of their children. Teeth were left to Nature, who is a very bad dentist. Bathrooms had hardly been invented.

The court jesters of the past, the clowns and pantaloons of later days, afford material for a very interesting article, with many illustrations.

Illusion That Deceived the World

Holland again gives opportunity for delightful pictures; there is a description of the country and the people, bringing their home life vividly before the reader.

An eloquent article on the Illusion that Deceived the World, with a powerful plea for common sense and a recognition of plain truths in dealing with international questions, which makes quite clear the reasons for the difficulties under which the world is labouring just now, is followed by the story of the wolf, the bandit of the wild, the king of dogs, the old, old enemy of man.

Tycho Brahe—what do you recollect about him? Was he not an astronomer? When did he live? You forget. Well, you can learn all about Tycho Brahe, the Danish nobleman who laid the foundations of our knowledge of the planets and the stars.

A Full Budget

The House Beautiful, and what makes it beautiful, must interest everyone who cares about congenial surroundings.

The Mystery of Imagination takes us deep into psychology, yet explains it with the most charming simplicity.

Then come the features which are looked for so eagerly every month—stories and pages of fun, poems, and short articles. A full budget, indeed, and one to please every taste—except the taste for rubbish. There is none of that in My Magazine, and therein lies the reason of its immense popularity.

THE WEEK IN HISTORY

A GREAT DREAMER

Travelling Tinker's Famous Book

JOHN BUNYAN'S MESSAGE TO THE WORLD

Aug. 27. Sir Rowland Hill died at Hampstead 1879
28. Leigh Hunt died at Putney 1859
29. John Locke born at Wrington, Somerset 1632
30. Sir John Ross died in London 1856
31. John Bunyan died in London 1688
Sept. 1. Transvaal annexed by Great Britain 1900
2. Great Fire of London began 1666

John Bunyan, the writer of the Pilgrim's Progress, the book second only in popularity to the Bible throughout the world, died in London on August 31, 1688.



John Bunyan

Bunyan was born at Elstow, near Bedford, in 1628, the son of a tinker, and he followed the same occupation.

Though John thought himself a very wicked young man, according to the strict ideas of his day, his wrongdoing, except in the use of bad language, was not what we should now think wrong.

After he had served a short time as a young soldier he returned home and married a wife who owned two religious books, and, reading these and the Bible, John escaped from his religious fears and began to preach the good tidings by which he had been blessed.

But preaching was not then allowed except by men who were authorised to preach, and John was not authorised, so, as he would not promise not to preach, he was kept 12 years in Bedford prison. There he wrote a number of religious books and preached to the prisoners, and everybody respected him.

Great Book Written in Prison

At the end of 12 years the law was changed and religious prisoners were released. The reason was because the new king, James II., was a Roman Catholic, and, as many people in prison were Catholics and the king wanted them to be released, all religious prisoners were set free, including Bunyan.

He now was authorised to preach and became the minister of the church of Bedford of which he was a member. Also he preached in all the neighbourhood around, and sometimes in London, and was very popular. But during these years he was again imprisoned for six months, and it was during this second imprisonment that he wrote the Pilgrim's Progress.

So widely was this book read and admired that Bunyan's enemies could not, for very shame, persecute him any more. So he was set free, and preached and wrote many books, including his fine religious parable, The Holy War.

Translated Into 100 Languages

John Bunyan's Pilgrim's Progress has been translated into nearly 100 different languages, for, though John was a man with little education, he knew his Bible perfectly, and the Bible provided him with a style of writing that is simple, clear, and beautiful. Then, too, he had a fine imagination, homely humour, and an intense faith; and such a man deeply impresses those who come under his influence.

The Pilgrim's Progress is a parable-story of a Christian's journey through life. Much of it is as beautiful as the most beautiful poem. A little child can read it, and the more one knows about the best ways of writing our noble English language, the more one admires it, and admires, too, the brave and good man who wrote it, and who, beginning life as a travelling tinker, ended it as a saintly hero, and was never false to what he thought was true.

RATTLESNAKES INVADE A PARK

Grounds Closed to Pleasure-Seekers

DANGER OF SLEEPING IN HOLIDAY CAMPS

It is believed by some experts that rattlesnakes are increasing in certain states of America.

These pests do very little good in removing harmful vermin, but they do immense damage in destroying small insect-eating animals and birds, and every year they take a heavy toll of life in the states where they abound, such as California, Arizona, Nevada, New Mexico, Colorado, and Texas.

Quite recently one large public park in a western city has had to be closed because of the growing danger from rattlesnakes.

Some time ago it was stated with some appearance of authority that a sleeper could protect himself by laying a loop of rope on the ground all round him, and thousands of lariats are bought every year by holiday-makers for this purpose. But there is no truth in the statement. A rattlesnake will crawl over a rope as readily as over the bare ground.

The only remedy is to sleep in a snake-proof tent, which has a floor and door sewn or laced tightly to the walls.

The greatest danger from rattlesnakes is when they are casting their skins, as at such seasons they do not give the usual rattle of the tail to warn people. The latest method of fighting rattlesnakes is to flood their lairs with poison gas.

ARITHMETIC RACE

Adding Machine Beats the Ancient Abacus

A very interesting contest between ancient and modern methods was recently fought out at Shanghai, and resulted in a victory for the modern system.

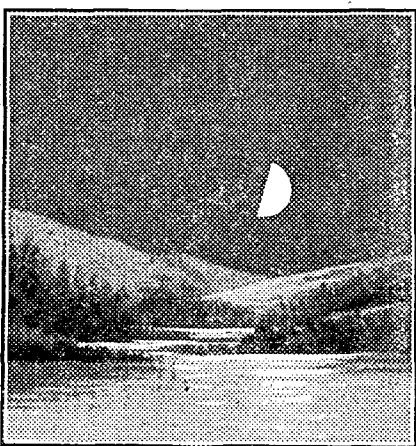
Chinese business men do most of their calculations by means of an apparatus known as the swanpan, a slightly elaborated form of the abacus used by English children in schools and nurseries.

A small swanpan, with 63 beads arranged on wires, will calculate up to millions, and the Chinese are such adepts in its use that often they can beat Europeans using modern mechanical calculating machines.

In the recent contest, which attracted great attention in the Chinese business world, an American salesman representing an adding-machine company challenged an adept Chinese to compete with him in various calculations, each using his own apparatus, the Chinese his swanpan and the American his mechanical calculator. The merchants were very surprised when the native was badly beaten.

Not only was the American ahead in point of time, but he was more correct in his results, and all the time he was working out his sums he was able to talk, which the Chinese could not do.

THE MOON NEXT WEEK



The moon at 10 p.m., summer time, on Aug. 30

C.N. QUESTION BOX

Little Puzzles in Natural History

Answered by Our Natural Historian

All questions must be asked on postcards, and not more than one question on each card. Name and address must always be given.

How Many Kinds of Birds are Known?

The species of birds known to science number upward of fifteen thousand, and the number grows.

Do Bats Lay Eggs?

Bats do not lay eggs. The only mammals to do so are the duck-billed platypus and the echidna.

Is it Usual for Migratory Birds to Return to the Same Locality Each Year?

Many do, but information as to birds in general is not yet sufficient to say that all, or nearly all, do.

Do Silkworms Like Sunshine?

Not direct blazing sunshine that would scorch them, but such as gives a generous supply of heat without danger.

How Can an Owl be Tamed?

A captive owl soon becomes friendly with anyone who is kind to it, feeds it, and performs no act to play on its fears or suspicions.

How Do Snakes Swim?

Much in the manner of eels and similar creatures, by a sinuous, wriggling motion, which propels them rapidly through the water.

What Should Baby Frogs be Fed on?

Small worms, slugs, moths, flies, and other insects form the food of young frogs. The food must have life and movement, or the frogs will not take it.

Do Tortoises Eat Slugs and Snails in the Garden?

They do not; neither do they eat beetles in the house—that is a dishonest or ignorant salesman's tale. Garden tortoises are exclusively vegetable feeders.

How Do Camels Store Water While Travelling?

The reserve supply is contained in specially-modified cells in the stomach. The animal draws upon these cells at will, and keeps the store undiminished till thirst calls for satisfaction.

How Long Should Silkworms be Kept Before the Silk is Wound Off?

The treatment of the cocoon may be begun as soon as there is complete silence within it, showing that the caterpillar has reached the insensibility of the chrysalis stage.

Why Does a Dog Bury Its Food?

The habit is an interesting survival of an instinct ages old, tracing back to days when dogs were wild beasts, and hid surplus supplies for future use, as squirrels save up nuts.

Do Young Robins Kill Their Parents?

At the end of the summer, when young birds are fully developed, battles take place for territory. In such battles the flight of the loser is generally the result, not death. Sometimes such a contest may be fatal, but very rarely.

Do Wild Canaries Sing as well as Caged Birds?

As a rule, no, for caged canaries descend from a long line of treasured captives which have been selected by man for their song. Wild song is a haphazard, natural selection; that of the domesticated canary is the product of generations of encouragement by man.

Newspaper Notes and Queries

What does H.P. mean? These letters are an abbreviation for horse-power.

What is a Sea Bow? A marine rainbow seen in the spray of waves at sea.

What is a Stathmograph? A device for recording the speed of a railway train.

What does Ultra vires mean? When persons exceed the authority granted by the law, or by approved rules and regulations, they are said to act ultra vires, or beyond one's powers.

What is a Buttery? A room or cellar for storing butter, milk, provisions, or butts of wine. The word survives in colleges as a place where food and drink are kept for sale to students.

THE ARCHER AND HIS BOW

AVENUES LINED WITH GIANT SUNS

Light That Takes Nearly 200 Years to Reach Us

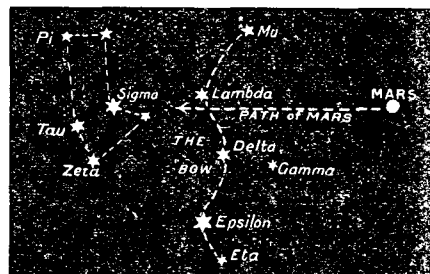
WHERE MARS MAY BE SEEN

By Our Astronomical Correspondent

At the end of next week the planet Mars will enter Sagittarius, the Archer, one of the most ancient constellations of the Zodiac.

He will then be in a martial region of the sky, and his rosy brilliance will not only adorn Sagittarius with, as it were, a brilliant medal, but will enable us the more easily to identify the chief orbs in this splendid, but little known, constellation, which is pictured below.

It occupies a large area of the southern sky, extending from the horizon to about one quarter of the way up toward overhead point, an area about the size of



Sagittarius, with the path of Mars in September

the Great Bear. It therefore does not rise very high, and is visible for only three or four hours in its entirety.

Just now its chief stars pass due south between 9 and 11 p.m. An uninterrupted view down to the horizon is needed to see all its chief stars, and, unfortunately, the radiance of this constellation is much reduced, and its splendid collection of myriads of glittering points of light screened, by the haze usually present near our horizon.

But opera glasses will reveal the richness of this region, while powerful telescopes reveal hundreds of millions of stars.

Suns Far Larger than Ours

Of course, colossal distances separate the stars or group of stars; but we see them through long vistas of both time and space, through hundreds, and even thousands, of light years, and through avenues lined with innumerable suns.

Our star map shows, on a very small scale, nearly all the stars that are ordinarily visible in this country through the haze, also the position of Mars at the beginning of next week before the Moon gets into that region, which she does by Wednesday and Thursday next, after which observations should be delayed till the moonless nights return.

The most noteworthy feature is the famous Bow of the Archer, composed of the five stars shown in our map.

Epsilon, the brightest star in Sagittarius and lowest but one in the Bow, is a magnificent sun, of the Sirius type, giving about 25 times the light of our Sun, and is far hotter. Its light takes 40 years to reach us, so it is about 2,600,000 times as far away as our own Sun.

Vast Distances of Space

Lambda is a sun more like our own, but inferred to be much larger, because it gives about 15 times more light. It is 3,200,000 times as far off as our Sun, and its light takes nearly 50 years to reach us.

Sigma, the second brightest and most readily seen of the stars in Sagittarius, is about 3,000,000 times as far away, and gives 25 times as much light as our Sun, its light taking 45 years to get here.

Zeta, a much smaller sun and the nearest of all to us, its light taking nearly 29 years to come to us, is only 1,900,000 times the distance of our Sun. But the light of the star known as Pi in Sagittarius takes 102 years to reach us. This, therefore, is really a colossal sun, 12,600,000 times as far off as our own. G. F. M.

MEN OF THE MIST

The Exciting Adventures of Two Boys Among the Indians

Told by T. C. Bridges,
the C.N. Storyteller

CHAPTER 69

The Signal

It was not a pleasant thought, and Billy's next idea was that he had better warn his gaolers.

But he decided to wait. There was just the chance that it might not be one of the Kaloots, but a scout from the Mist Men of the valley.

This thought cheered Billy enormously. For the moment he forgot cold and cramp and all his miseries, and lay still as a mouse, watching and listening.

A voice made him start. People in the tent were speaking.

At first the voices were so low that Billy could not hear what was being said. But presently Gurney spoke in a clearer tone.

"Done! Of course we're not done! Not so long as we've got the boy to bargain with."

"What good will that do if they get round us?" retorted Craze.

"Mebbe we can bargain for our lives, but that's about all, so far as I can see."

Gurney gave vent to an angry exclamation.

"You're pretty near the limit in idiots, Craze. I only wish I'd got someone along with me who's got a little sense. Seems to me there isn't much to choose between you and Pelly. See here! Ballard is dead nuts on his boys. I know that much, for I knew him back in England. Now, we've got this younger one tight in our hands. Ballard can't rush us, for he doesn't know that all our Indians have quit; anyhow, he doesn't know just where to find us in this big belt of woods. My notion is this. I'll go out with a white flag and see him personally and make terms. In exchange for the boy he'll have to give us a safe conduct and a good bunch of furs into the bargain."

"I reckon he won't do it," growled Craze.

"He's got to do it. If it comes to that, we have another pull over him; and he knows it."

"The police job, you mean," said Craze. "Seems to me that's all the more reason why he shouldn't let us go. Don't you see once we're done for or prisoners in that valley of his, he's safe?"

Gurney laughed, and it was an ugly sound.

"I've a notion I can convince him that's not the case," he replied. "You leave it to me, Craze. I'll guarantee to handle it all right."

"You always were a cute one," admitted Craze, grudgingly. "And, anyway, Pelly and me, we haven't any choice, for we're up against it good and hard. You going now?"

"Yes. The sooner the better, for if we wait till full light his Indians may find out that ours have quit."

Next moment Gurney came out of the tent. He scowled at Billy, then turned to Craze.

"Take mighty good care of the kid," he ordered. "He's all that stands between us and trouble."

"I know that," replied Craze curtly. "We'll be here when you get back."

Gurney walked off and disappeared among the thick trees, and Craze came out and set to rebuilding the fire. While he did so Billy anxiously watched the fallen tree behind which the mysterious prowler had disappeared. The light was increasing now and he could see the trunk plainly, but the person who had been creeping behind it had utterly disappeared. There was not a sign of him, nor a sound.

Now, Billy was mad to get away, for he realised that he was all that stood between these black-guards and defeat. As Gurney had said, once the three were prisoners, the danger to his father was over,

for there would be no one to give evidence against him or even to identify him.

Whenever Craze was not watching, Billy pulled and twisted at his ropes, but they were too well knotted, and he could do nothing.

Craze went to a little distance to get some fresh wood for the fire, and Billy took the opportunity to glance once more at the fallen tree.

Suddenly a head rose from behind it. Billy could hardly believe his eyes, for it was Clem who was looking at him—Clem, who made a quick signal with his hand, then dropped like a shot and vanished.

CHAPTER 70

Pluto Interferes

BILLY's heart beat so hard that he nearly suffocated.

He had seen that Clem had a gun. If Clem could only get near enough to get the drop on Craze all might yet be well. Craze was alone for the moment, for Pelly was not yet back, and Billy had a notion that Craze was a coward at heart, and would give up at once if a gun were pointed at him.

Billy glanced at Craze, who was still picking up wood; then back at the log. He caught sight of Clem again, and saw that he had left the cover of the log and was creeping on hands and knees toward the hollow where the tent stood.

He saw something else. Clem had a dog with him—a great, black, shaggy beast which Billy knew in a moment for Pluto, one of the valley guards, the strongest and fiercest of them all. The dog crept after Clem, silent as a wolf.

Craze came back to the fire, and Billy dared no longer look round.

By this time the suspense was so intense that he could hardly breathe. He really felt as if he could not stand it much longer. The seconds crawled like minutes, and, as each passed, Billy's ears were straining for sound of Clem's approach.

Suddenly a dead stick cracked and Billy's heart was in his throat.

Craze, too, heard it and jumped to his feet.

"Who's that?" he snapped.

"Put your gun down. It's only me," came Pelly's voice, and the man himself broke through the bushes, and came striding down into the hollow.

Billy's heart dropped to his boots. Could there be more cruel luck? Now it was two to one, and Clem would surely not make any attempt at rescue. If he did the result could only be disaster.

"See Gurney?" asked Craze.

"Yes, I saw him. He told me to come along back. Seems he's going to try some stunt with the Big Britisher."

Pelly's voice was a sneer, and Craze turned on him at once.

"Don't you go talking that way. Gurney's the only one that can pull us out of this here fix."

"It's Gurney that dragged me into it," retorted Pelly angrily—"you and him together."

Craze's dark eyes blazed.

"Shut your mouth!" he snarled.

"We've got the boy, and as long as we've got him, we're safe enough."

Pelly looked for a moment as if he were going to hit Craze. But the other man's appearance was so dangerous that he refrained. He swung round and vented his ill-temper by kicking Billy in the ribs.

Billy could not repress a cry.

The result was startling. Next instant a great black beast leaped out of the bushes on the edge of the hollow, and, with a terrifying howl, rushed straight at Pelly and seized him by the leg.

Pelly roared with pain, and went down with the dog on top of him. Craze made a rush for his rifle, but as he snatched it up there came the

crash of a heavy report from the rim of the hollow, and the rifle flew from his hand. A bullet had struck the barrel.

"Hands up, Craze!" came Clem's clear voice; and there he stood, with his rifle pointed at Craze's head.

Craze had more pluck than Billy had credited him with. He gave a yell of rage and leaped at Clem. Clem's rifle spoke, but the bullet went wide, and Craze got Clem by the leg and pulled him down.

"You brat!" he cried furiously; and then he gave a different cry, for Pluto, leaving Pelly, had sprung upon Craze, and with the mere force of his spring knocked him sprawling. Before the man could do anything, Clem had crawled clear and jumped to his feet.

"Look out, Clem!" shrieked Billy. "Look out for Pelly!"

The long man was on his feet, and it looked as if he would get hold of Clem.

But Clem snatched up his rifle, and, holding it by the barrel, swung it desperately. The butt got Pelly on the side of the head, and down he crashed.

CHAPTER 71

A Breathing Space

"HURRAH!" shrieked Billy, almost beside himself.

But Clem kept his head.

"Hold him, Pluto!" he cried, and, snatching out a knife, slashed the cords that tied Billy.

In his excitement Billy forgot his aching bones and all his pains. He pulled himself together.

"Give me the rifle, Clem!"

Clem handed it to him, and Billy quickly glanced at the magazine.

"It's all right," said Clem. "It's loaded."

"Then you tie up Craze," said Billy. "I'll hold the rifle at his head to keep him quiet. Pelly's not going to move yet—not after the whack you gave him."

"Right!" Clem answered. "I'll tie Craze. But look out for him; he's a slippery customer."

"Don't you worry. I'm not taking any chances with him," said Billy. "Come off him, Pluto."

Pluto, growling formidably, obeyed. Craze's face was purple with a mixture of fury and fright.

"Now, Craze," said Billy, sharply, "the tables are turned, and you'd better realise that. If you try any more tricks, I shall shoot."

Craze ground his teeth, but made no answer. Then Clem set to work. Billy kept the muzzle of the rifle jammed hard against his body, and Craze was forced to realise that it was no use to resist. Inside a couple of minutes he was trussed up so that he could not move.

A STORY
MAGAZINE
FOR FATHER
AND MOTHER



Tell them to get
a copy TODAY

"Better gag him," said Billy. "Gurney may come back any minute, and we don't want him to get warning of what's happened to his pals."

Clem nodded, and gagged Craze with a handkerchief. Then he turned his attention to Pelly.

"Hope I haven't killed him," he said, uncomfortably.

"No fear. He's got a head like solid bone," returned Billy. "Tie his legs and arms."

This was soon done, and the boys had time to breathe.

"Where's Gurney?" demanded Clem.

Billy told him that he had gone to make terms.

"Didn't you see him?" he asked.

"Not I. I didn't see anybody. Pluto and I came on our own."

"Come on your own!" repeated Billy. "I say, Clem, you, are a brick!"

"Nonsense! I couldn't leave you in the hands of these pigs."

"You came all that way alone in the dark?" said Billy, wonderingly. "I'd never have had the pluck to do it. Why, you might have run right into the Indians! You didn't know they'd gone."

"I felt pretty sure of it," Clem answered. "I saw them running like fun when the geyser started up. But, I say, you must have had a perfectly awful time of it."

"It was pretty bad," admitted Billy. "And, to say truth, I'm nearly all in. What about a pot of hot coffee?"

Clem laughed.

"Some of theirs. This is turning the tables with a vengeance. All right. You sit still. I'll fix it."

The kettle was already on, and Clem piled small bits of wood around it. In a very short time it was boiling, and he made the coffee.

"Keep your eyes lifting," he warned Billy. There was no answer, and, looking round, he saw that his brother was lying by the fire, fast asleep.

Clem's lips tightened, for he began to understand what Billy had been through. But this was no time to sleep, and, very unwillingly, he roused him and gave him some coffee.

Billy drank it and revived. Then he ate some beef and flapjacks. Clem, too, had some food.

"There! I feel a heap better," said Billy, quite cheerfully. "What are we going to do next, Clem?"

"Sit tight. Gurney will come back sooner or later, and we've got to collar him. He's worth much more to us than either of these others, for he is the only one who can clear Dad."

Billy nodded. "That's so. Yes; we must clear him, Clem, and once we have Gurney it will be all right."

"Then we'd better keep quiet and out of sight. And these fellows ought to be put out of sight too. Can we get them into the tent?"

"Afraid I can't help you with that," said Billy. "I can barely stand up."

"I'll do it," said Clem.

It seemed an impossible task for a boy of his age, but Clem's muscles had hardened during the past two months. He managed to drag the men in. Then he and Billy took up their positions under lee of some bushes quite close to the fire, and waited. They knew they could trust Pluto to give them warning of the approach of Gurney.

Time passed. The sun was up, though the pall of grey snow-cloud hid it. It was broad daylight.

Billy grew uneasy.

"What on earth has happened?" he asked. "Gurney ought to have been back long ago."

"Hush!" whispered back Clem. "Someone's coming. Look at Pluto!"

The big dog's ears were lifting. It seemed certain that he heard someone coming. But strain their ears as they might, the boys could not hear a sound. They crouched down, Clem with his rifle ready, and the moments ticked by.

TO BE CONCLUDED

Who Was He?

The Miller's Son

THE son of a Dutch miller, born at the beginning of the seventeenth century, was intended by his father for one of the learned professions, but the boy showed such a passion for art that his father at length consented to allow him to follow his inclination.

At the age of twelve or thirteen, therefore, he began to take lessons under various masters of his day, and, returning to his father's roof when he was sixteen, he started work as an etcher, fitting up a studio in an attic of the mill. A few years later he went to Amsterdam, and set up a studio there.

His general education had been neglected, and it is said that he could not read, but he studied life and nature, and produced an enormous number of works of the first rank—500 paintings, 600 drawings, and 350 etchings. These have increased his reputation as the years have passed.

His prosperity grew, but his associations had been with the common people, and as he became richer he showed no inclination to change his companions or to seek for greater refinement and intellectual society.

He was a complete contrast to such an artist as Raphael, but his work is highly valued, because it is founded on the direct study of life and nature. He made a great collection of armour, flags, vestments, and similar objects, and these he often introduced into his pictures.

The beginning of his prosperity was due to an artist who advised him take one of his pictures to the Hague to an art lover there. He did so, and the connoisseur treated him with great respect and kindness, and paid him a hundred florins for the picture. News of this soon spread, and many people at once wanted to have their portraits painted by a man who could get a hundred florins for a single picture.

After going to Amsterdam he married a handsome peasant girl there, and she often figures in his pictures. As his fame grew orders flowed in, and the artist became well off. Students, too, flocked to his studio to learn from so great a master, and each student paid a hundred florins a year for the privilege.

He became somewhat greedy as he grew older, and is even said to have allowed some of his students' paintings to be passed off as his own, when all he had done was to put in a finishing touch or two. On some of his own paintings he put the word Venice

because he thought it would sell them better. This has led some biographers to think that he had been in Italy, whereas he never left Holland. He died in 1669. Here is his portrait. Who was he?





O Gift of God, O Perfect Day!



D! MERRYMAN

A TRAVELLER landing at Dover after a rough passage from France, sadly remarked to a friend: "It is our boast, as Englishmen, that Britannia rules the waves; but I wish to goodness she would only rule them straight."

WHAT part of a fish weighs most? The scales.

Floating



CRIED the Brownie, "There wasn't a boat I could hire, I beg you to note. 'But no matter,' said I When an angler came by; And that's why I'm afloat on a float."

WHAT word is shorter after having a syllable added? Short—shorter.

What Am I?

I'M but a little letter, still I've various duties to fulfil; But if you take My tail, you make An alteration in my lot; You'll say I'm shorter, but I'm not.

Solution next week

WHY should you ride a bucking horse if you wish to get rich? Because you are no sooner on its back than you are better off.

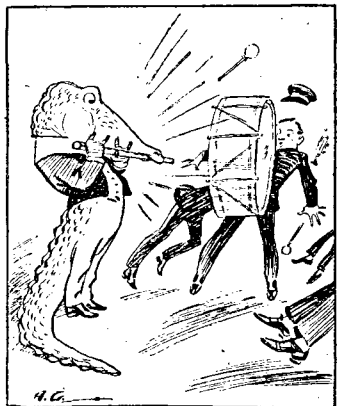
Do You Know

THAT it is incorrect to write by-law? The spelling should be by-law, and the word by means a town.

That moths do not eat clothes? The holes in garments and curtains and carpets are made by the grubs that are hatched from the eggs laid by the moth.

That the Duke of Wellington did not say "Up, Guards, and at them!" at Waterloo, as is so often stated?

That camel-hair paint-brushes are not made from the hair of camels, but from that of squirrels?



The Escapades of Johnny Crook

OUR young friend Johnny joined the band

And tried to play the flute; And when the band went out to play He dressed in his best suit.

Now Johnny could not play a tune, But tried so hard, you see, He blew the drummer several yards—

"Well, I'll be blowed!" said he.

The Rebel

THERE once was a schoolgirl named Joan Who spoke in a sceptical tone Of the value to trade Of a bucket and spade, And the value to health of ozone.

Do You Live in Cannon Street?

THIS name has nothing to do with guns, but is a corruption of Candlewick, and means the dwelling place of the candle-makers. The Cannon Streets in our towns were thoroughfares where the wax chandlers carried on their businesses in olden times.

WHAT is the simplest way of protecting a Turner picture in the National Gallery? Place a Constable on each side of it.

The Farmer and the Geese

B ONE day drove a flock of geese, And met with Farmer A. Says Farmer A, "How much a-piece For this flock did you pay?" Says B, "I paid for all I drive Just six pounds and a crown; And I'm going to sell them, all but five, At yonder market town, When fifteen pence a head I'll charge Above what they cost me, And thus obtain a sum as large As I gave for all, you see."

How many geese did B buy, what did he give for each, and what price did he ask? Solution next week

School Howlers



Something Like a Lather

WHAT would happen if a barber really did what a boy at school said he did? The boy was asked for a definition of lava, and he answered that it was stuff which a barber put on a man's face when he was going to shave him.

A Sweet Little Maid

THE grown-ups were discussing the costumes they were to wear at a fancy-dress ball, and little Joan was an interested listener.

When there was a pause in the conversation Joan asked if she could go as a milkmaid.

"Oh, no, dear!" replied her mother. "You are much too small!"

"But, Mummie," pleaded Joan, "I could go as a condensed milkmaid."

ANSWERS TO LAST WEEK'S PUZZLES

Do You Live Here? Hatfield

An Optical Illusion

The box contained 20 bricks

Heads and Feet

There were 22 birds and 14 beasts in the Zoo.

Jacko Turns Up Again

JACKO was perfectly happy on the luggage carrier. It's a wonder he didn't get jerked off, for the lid of the trunk he was sitting on was round and shiny, and the road was uncommonly bumpy.

"How long shall we be getting there?" he heard Belinda ask. "About an hour, if we have any luck," Joe answered.

"Are you afraid of the tyres?" asked Belinda.

"I shouldn't be surprised at anything, since young Jacko got hold of the car," growled Joe. "Racing it round on that new road—he wants his head knocked off."

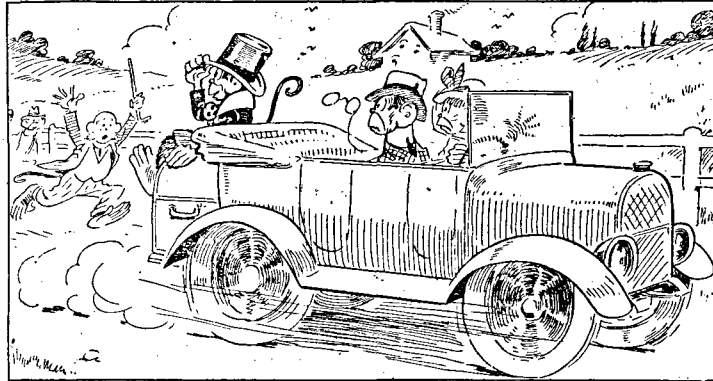
"He is a worry," agreed Belinda. "I'm sure I'm not sorry to get rid of him for a bit."

The box creaked loudly and Belinda heard it.

"Did you fasten the trunk on securely?" she asked.

Jacko ducked his head and waited breathlessly for the answer.

"That's all right," said Joe, and Jacko breathed again.



"Give me my hat," shouted the old gentleman

It was just after this that Belinda began to sneeze. She sneezed five times right off. When Joe asked her if she felt cold, she said: "Yes, a bit. I really ought to have put a scarf on. I suppose you couldn't stop and let me get one out of the trunk? It wouldn't take me a minute."

The trunk gave a loud creak that time.

"Crikey!" muttered Jacko; "now what am I going to do?" What he did was to wait till the car had stopped, then hop down, fall on his hands and knees, and scramble underneath.

He almost tied himself into a knot trying to keep his arms and legs out of sight. And he got a terrible stitch in his side trying not to laugh.

He wasn't sorry when Belinda had found her old scarf, and shut the box, and got back into her seat again.

"That's better!" she said, snuggling down in her corner.

"That's better!" said Jacko, scrambling out of the dust.

The next minute he was up on his perch again, grinning cheerfully.

A little way farther on they passed an old gentleman, bent almost double, examining a flower by the side of the road. His cane was tucked under his arm, and at the end of it, stuck right away from him, was a large top hat.

Jacko giggled when he caught sight of it, put out his hand, and snatched the hat up. Round spun the old gentleman.

"Hi! Stop! He's got my hat!" he shouted. "Stop the car! That boy's stolen my hat!"

Joe and Belinda stared back indignantly.

"You give me my hat," cried the old gentleman, running up to them as the car slowed down.

"We haven't got your hat," shouted Joe. "The man's mad!"

But Belinda had caught a glimpse of something that seemed familiar. She leaned over the side of the car.

"It's that Jacko!" she cried. "And I did think we'd got rid of him for a bit!" she added dolefully.

Ici on Parle Français



La ferme Le clown Le hamac

Tout le monde est gai à la ferme Un clown me fait toujours rire Cet homme est assis dans le hamac



Le squelette Le faisan La neige

Il y a des squelettes au musée Le chasseur a tué trois faisans La terre est couverte de neige

Those Who Come and Those Who Go

How many people are born in your town and how many die? Here are the figures for four weeks in 12 towns.

TOWN	BIRTHS	DEATHS
	1922	1921
London	7499	7779
Glasgow	2159	2295
Liverpool	1709	1712
Manchester	1316	1457
Dublin	833	891
Edinburgh	731	735
Hull	561	610
Cardiff	382	398
Southampton	259	254
Coventry	202	264
Norwich	200	184
Bath	81	87

The four weeks are up to July 29, 1922

Tales Before Bedtime

Fido

FIDO lived in a glass bowl set on a table in the nursery window, and Betty gave him ants' eggs every day for his dinner. She would call him Fido, though Robin said it was a silly name to give a goldfish.

Before he had lived in the glass bowl a week Fido began to grow less lively, and his pretty little red-gold back looked dull instead of bright.

"It's because he is lonely all by himself, poor darling!" Betty said.

Then Robin had an idea. He found his old shrimping-net, and when Jane was not looking he went off to the pond to fish for a minnow to keep Fido company.

But he had only just pulled his net out of the muddy water for the first time when Jane rushed up and dragged him home.

It was no use explaining; Jane wouldn't listen. She said she didn't care if Fido was lonely; Robin was not going to spoil his best suit with nasty fishing if she could help it.

Robin took his net into the garden-shed, and as he emptied the mud away out fell a fat old water-snail.

"You pop him into the glass bowl along with the goldfish and a bit of water-weed," advised John, the old gardener. "Water-snails are grand for keeping the water fresh and sweet."

This was a splendid idea, and Robin decided to name the snail George, and let him be Fido's servant.

Betty didn't like it at first. She said George was ugly, and nobody ever saw the creature sweeping or dusting. But she was pleased in a few days to see Fido frisky and beautiful, and as lively as a little cricket again.



Fido lived in a glass bowl

"I suppose now that George lives with him Fido isn't afraid of robbers," she said.

"No; it's because George amuses him. He looks a dull fellow, but I expect he knows lots of funny tales about minnows and sticklebacks," said Robin.

But when they told John, he said: "Ah, there's nothing like an old water-snail for keeping a place clean!"

The Children's Newspaper grew out of My Magazine, the monthly the whole world loves. My Magazine grew out of the Children's Encyclopedia, the greatest book for children in the world.

CHILDREN'S NEWSPAPER

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THE LITTLE MOTHERS • A TRAVELLING BIG WHEEL • SAILING OVER THE BEACH.



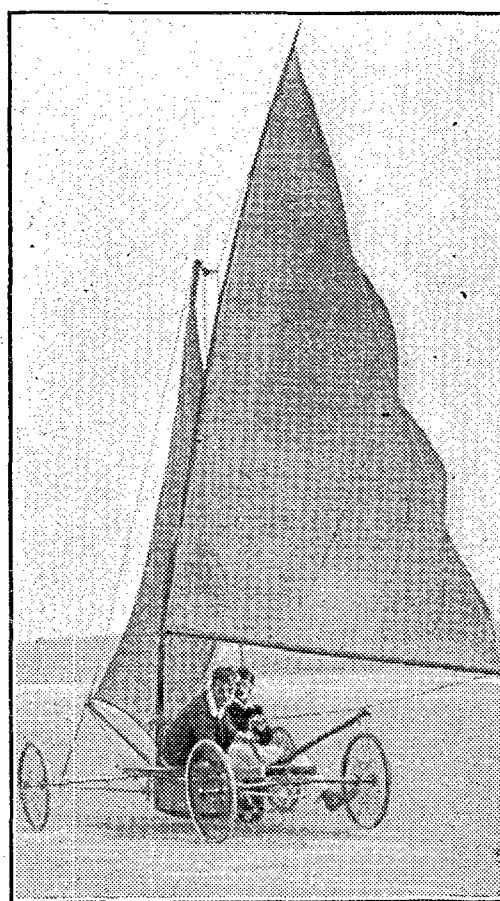
Hush-a-bye, Baby—Little Welsh girls singing a lullaby at the recent National Eisteddfod at Ammanford, in Carmarthenshire, where, on the children's day, folk songs were sung with action



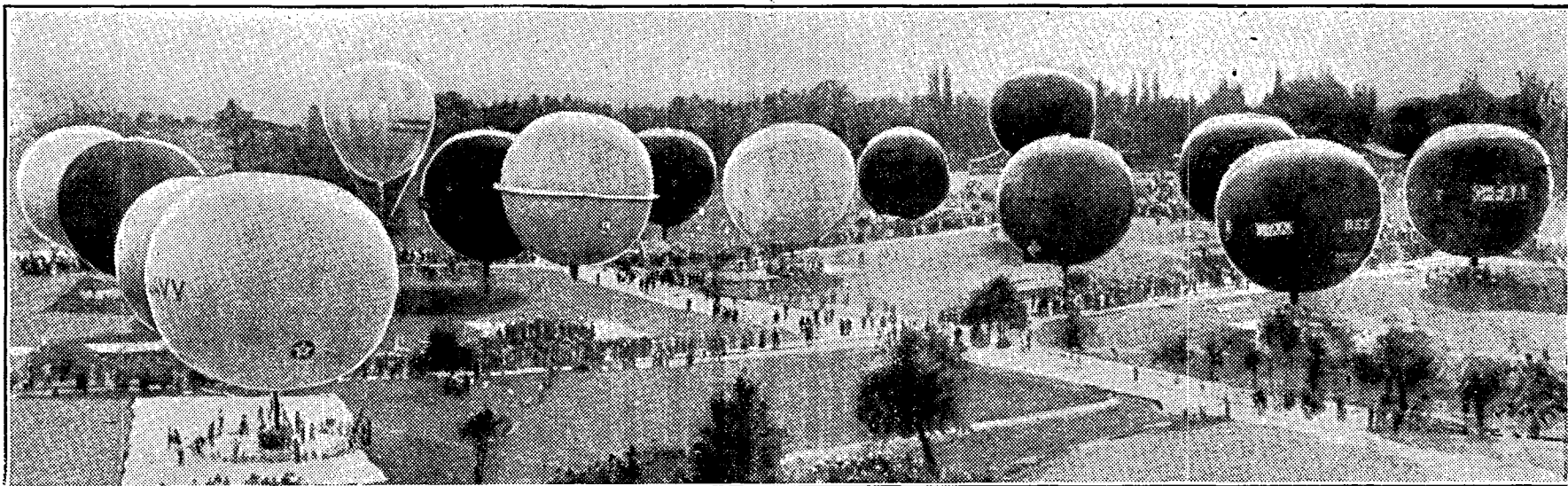
Bowmen of the Twentieth Century—Woodmen of Arden, members of a society that dates back to 1785, awaiting their turn to shoot at the recent annual archery tournament held at Meriden, near Coventry



A Travelling Big Wheel—Grown-ups will remember the big wheel that used to be at Earl's Court, in London, but here is a new kind of big wheel that travels about, and was recently seen at a holiday fair at Peckham Rye. As can be seen, travellers are carried high above the houses



Sailing Over the Beach—Sand-yachting is an exhilarating sport that requires great skill, as the yacht is easily overturned. This picture shows a sand-yacht at Le Touquet, in France, starting for a voyage



Waiting for the Word to Start—Some of the balloons that took part in the great international race for the Gordon-Bennett Cup lined up at Geneva waiting for the word to start

ALL THE WORLD LOVES THE C.N. MONTHLY. ASK FOR MY MAGAZINE. EDITED BY ARTHUR MEE

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